

EXHIBIT H

653165/2024 - New York County Supreme CourtShort Caption: **KAREN CHEUNG v. Darren Wang Yip Lui et al**Case Type: **Commercial - Other (RICO and other claims)**Case Status: **RJI Pending**eFiling Status: [Partial Participation Recorded](#)

Narrow By Options

Document Type:

Filed By:

Motion Info:

Filed Date:

Document #:

[Show Motion Folders ONLY](#)

Sort By:

#	Document	Filed By	Status
1	SUMMONS WITH NOTICE	Cheung, W. (Pro Hac / Pro Se) Filed: 06/24/2024 Received: 06/24/2024	Processed Confirmation Notice
2	AFFIRMATION/AFFIDAVIT OF SERVICE <i>Affidavit of Service on Securis Capital Limited</i>	Wang, M. Filed: 12/31/2024 Received: 12/31/2024	Processed Confirmation Notice
3	AFFIRMATION/AFFIDAVIT OF SERVICE <i>Affidavit of Service on Aeneas Management Limited</i>	Wang, M. Filed: 12/31/2024 Received: 12/31/2024	Processed Confirmation Notice
4	AFFIRMATION/AFFIDAVIT OF SERVICE <i>Affidavit of Service on Kenrick Henry Fok</i>	Wang, M. Filed: 12/31/2024 Received: 12/31/2024	Processed Confirmation Notice
5	AFFIRMATION/AFFIDAVIT OF SERVICE <i>Affidavit of Service on Darren Wang Yip Lui</i>	Wang, M. Filed: 12/31/2024 Received: 12/31/2024	Processed Confirmation Notice
6	AFFIRMATION/AFFIDAVIT OF SERVICE <i>Affidavit of Service on Mandy Man Lok Lui</i>	Wang, M. Filed: 12/31/2024 Received: 12/31/2024	Processed Confirmation Notice
7	AFFIRMATION/AFFIDAVIT OF SERVICE <i>Affidavit of Service on Aeneas Group Limited</i>	Wang, M. Filed: 12/31/2024 Received: 12/31/2024	Processed Confirmation Notice
8	*** DELETED: FILING ERROR ***		
9	*** DELETED: FILING ERROR ***		
10	*** DELETED: FILING ERROR ***		
11	*** DELETED: FILING ERROR ***		
12	*** DELETED: FILING ERROR ***		
13	*** DELETED: FILING ERROR ***		
14	*** DELETED: FILING ERROR ***		
15	*** DELETED: FILING ERROR ***		
16	*** DELETED: FILING ERROR ***		
17	*** DELETED: FILING ERROR ***		
18	*** DELETED: FILING ERROR ***		
19	*** DELETED: FILING ERROR ***		
20	*** DELETED: FILING ERROR ***		
21	*** DELETED: FILING ERROR ***		
22	*** DELETED: FILING ERROR ***		
23	*** DELETED: FILING ERROR ***		
24	NOTICE OF MOTION *Corrected* <i>For Default Judgment</i>	Wang, M. Filed: 01/08/2025 Received: 01/09/2025	*** Pending *** Confirmation Notice
25	MEMORANDUM OF LAW IN SUPPORT	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
26	AFFIRMATION <i>of Minyao Wang</i>	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
27	EXHIBIT(S) - 1 <i>Affidavits of Service</i>	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
28	EXHIBIT(S) - 2 <i>Affidavit of Mailing</i>	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
29	AFFIRMATION <i>Karen Cheung</i>	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
30	EXHIBIT(S) - A	Wang, M.	Processed

31	EXHIBIT(S) - B December 2024 6K	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
32	EXHIBIT(S) - C September 2020 registration statement	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
33	EXHIBIT(S) - D Contract Research Agreement	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
34	EXHIBIT(S) - E 2019 annual report	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
35	EXHIBIT(S) - F consulting agreement	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
36	BILL OF COSTS (PROPOSED)	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
37	ORDER (PROPOSED)	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	Processed Confirmation Notice
38	RJ1 -RE: NOTICE OF MOTION	Wang, M. Filed: 01/08/2025 Received: 01/08/2025	*** Pending *** Confirmation Notice

1

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----x Index No. /2024
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS CAPITAL
LIMITED), AENEAS MANAGEMENT LIMITED,
KENRICK HENRY FOK, DARREN WANG YIP LUI,
MANDY MAN LOK LUI, and AENEAS GROUP
LIMITED),

Defendants.
-----x

To the above named-defendants:

YOU ARE HEREBY SUMMONED to appear in this action by serving a notice of
appearance on Plaintiff Karen Cheung (a/k/a Wing Tsz Cheung) at the address set forth below,
and to do so within 20 days after service of this Summons (not counting the day of service
itself), or within 30 days after service is complete if the Summons is not delivered personally to
you within the State of New York.

YOU ARE HEREBY NOTIFIED THAT should you fail to answer or appear, a
judgment will be entered against you by default for the relief demanded herein.

PLEASE TAKE NOTICE that this is an action to recover financial losses sustained by
Ms. Cheung as a result of unauthorized purchase in her name of shares of Aptorum Group
Limited, which is traded on the NASDAQ Exchange under the symbol APM in New York City.
The relief sought arises from at least the following causes of action: (i) violations of the federal
Racketeer Influenced and Corrupt Organizations Act (“RICO”), 18 § U.S.C. 1961(c), (ii)
conspiracy to violate RICO, 18 U.S.C. § 1961(d), (iii) fraud, (iii) breach of fiduciary duty, (iv)

negligent misrepresentation, (v) unjust enrichment, (vi) civil conspiracy and (vii) violations of the federal Securities Act of 1933, 15 § U.S.C. 77a *et. seq.*

PLEASE TAKE FURTHER NOTICE that Ms. Cheung seeks in this action damages in an amount not less than \$2,000,000 USD, and punitive damages to the extent permitted by law, plus all her legal fees and costs.

PLEASE TAKE FURTHER NOTICE that Ms. Cheung expressly reserves the right to amend her claims in this action to include other causes of action as may be appropriate.¹

By: _____
Karen Cheung
1178 Broadway
3rd Floor #1066
New York, NY 10001
Wtcheung03@gmail.com
+852 96871057
Plaintiff

Dated: June 23, 2024

¹ Consistent with New York City Bar Opinion 1987-2 and in an abundance of caution, Ms. Cheung states that this pleading has been prepared with the assistance of New York counsel.

2

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),
Plaintiff,
-against-

Index No. 653165/2024
NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),
Defendants.

**Venue is proper under CLPR
SS 503(a)**

-----X

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Securis Capital Limited, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024, at around 4:44 p.m. I served Securis Capital Limited with a Summons with Notice dated 23rd June 2024 by leaving the same at Room 1009, 10th Floor, Office Plus @ Prince Edward, Nos. 794 – 802 Nathan Road, Kowloon, Hong Kong being the registered office of Securis Capital Limited.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

3

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),
Plaintiff,
-against-

Index No. 653165/2024
NY Summons with Notice

**Plaintiff designates New York
County as place of trial**


SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),
Defendants.

**Venue is proper under CLPR
SS 503(a)**

-----X

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Aeneas Management Limited, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024, at about 4:32 p.m. I served Aeneas Management Limited with a Summons with Notice dated 23rd June 2024 by leaving the same at Unit 1404, 14th Floor, Cheung Fung Commercial Building, Nos. 21 – 25 Cheung Sha Wan Road, Kowloon, Hong Kong being the registered office of Aeneas Management Limited.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

4

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Kenrick Henry Fok, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 3:45 p.m. I served Kenrick Henry Fok with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Kenrick Henry Fok at Flat 5B, Choi Tien Mansion, 11 Tai Koo Wan Road, Taikoo Shing, Hong Kong.
4. At a subsequent time on the same day, i.e. at about 4:44 p.m. I arrived at Room 1009, 10th Floor, Office Plus @ Prince Edward, Nos. 794 – 802 Nathan Road, Kowloon, Hong Kong for the purpose of serving a Summons with Notice dated 23rd June 2024 on Kenrick Henry Fok. At that time, I was informed by a female adult that there was no such person named Kenrick Henry Fok in there. Then I left.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

5

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Lo Lok Lung, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Darren Lui Wang Yip, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 4:04 p.m., I served Darren Lui Wang Yip with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Darren Lui Wang Yip at Flat C, 24th Floor, Block 2, Scenecliff, Mid-levels, Hong Kong.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Lo Lok Lung

6

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),
Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Lo Lok Lung, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Mandy Man Lok Lui, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 3:20 p.m. I arrived at the office of Blackrock, 16th Floor, Champion Tower, Three Garden Road, Central, Hong Kong for the purpose of serving a Summons with Notice dated 23rd June 2024 on Mandy Man Lok Lui. At that time, I was informed by a receptionist that she was on vacation until November 2024. Then Ms. Winnie Lau, the secretary of Mandy Man Lok Lui to receive the said documents on behalf of Mandy Man Lok Lui.
4. Subsequently on the same day at about 4:04 p.m. I served Mandy Man Lok Lui with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Mandy Man Lok Lui at Flat C, 24th Floor, Block 2, Scenecliff, Mid-levels, Hong Kong.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.

A handwritten signature in blue ink, appearing to read "Lo Lok Lung", is written above a horizontal line.

Lo Lok Lung

7

SUPREME COURT OF THE STATE OF NEW YORK

COUNTY OF NEW YORK

-----X

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.

-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Aeneas Group Limited, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 3:08 p.m. I served Aeneas Group Limited with a Summons with Notice dated 23rd June 2024 by leaving the same at Unit 1306, 13th Floor, Nos. 93 – 103 Wing Lok Street, Sheung Wan, Hong Kong being the registered office of Aeneas Group Limited.
4. Afterwards, at about 5:40 p.m. on the same day I served Aeneas Group Limited with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Aeneas Group Limited, care of Ng Wai Ip William, at Room 1003, 10th Floor, Fu Yuen South Estate, Wong Tai Sin, Kowloon, Hong Kong.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

8 – 23

***** DELETED: FILING ERROR *****

24

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Index No. 653165/2024

Plaintiff,

v.

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED,

Defendants.

**CORRECTED NOTICE OF
MOTION**

PLEASE TAKE NOTICE that upon the Summons with Notice, the affidavits of service for same, the annexed affirmation of Minyao Wang dated January 6, 2025, and the exhibits attached thereto, Plaintiff Karen Cheung's affirmation dated January 2, 2025, the accompanying memorandum of law, and all prior papers and proceedings in this action, Plaintiff Karen Cheung, a/k/a Wing Tsz Cheung, by and through undersigned counsel, hereby moves before the Supreme Court of New York, New York County, in the Motion Submission Part, Room 130 at the Courthouse located at 60 Centre Street, City and State of New York, on February 13, 2025, or as soon thereafter as counsel may be heard for judgment against Defendants Securis Capital Limited (f/k/a Aeneas Capital Limited), Aeneas Management Limited, Kenrick Henry Fok, Darren Wang Yip Lui, Mandy Man Lok Lui, and Aeneas Group Limited, in the amount of \$2,221,480.05, legal fees and costs permitted by the federal RICO statute, plus costs and disbursements of this action, and for such other and further relief as the Court deems just and proper, on the grounds that

Defendants Securis Capital Limited (f/k/a Aeneas Capital Limited), Aeneas Management Limited, Kenrick Henry Fok, Darren Wang Yip Lui, Mandy Man Lok Lui, and Aeneas Group Limited, have defaulted in appearing.

PLEASE TAKE FURTHER NOTICE, that pursuant to CPLR § 2214(b), answering affidavits, if any, shall be served upon the undersigned at least seven days before the return date of this Motion, and any reply or responding affidavits shall be served at least one day before the return date of this Motion.

DATED: January 6, 2025

Respectfully submitted,

LEWIS BRISBOIS BISGAARD & SMITH, LLP

By: /s/ Minyao Wang

Minyao Wang
NY State Bar No. 4744314
77 Water Street, Suite 2100
New York, New York 10005
minyao.wang@lewisbrisbois.com
212.232.1300
Attorneys for Plaintiff Karen Cheung

25

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Index No. 653165/2024

Plaintiff,

v.

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED,

Defendants.

**PLAINTIFF'S MEMORANDUM OF LAW IN SUPPORT OF MOTION FOR ENTRY OF
DEFAULT JUDGMENT AGAINST DEFENDANTS SECURIS CAPITAL LIMITED
(F/K/A AENEAS CAPITAL LIMITED), AENEAS MANAGEMENT LIMITED,
KENRICK HENRY FOK, DARREN WANG YIP LUI,
MANDY MAN LOK LUI, AND AENEAS GROUP LIMITED**

Minyao Wang
**LEWIS BRISBOIS BISSGAARD & SMITH,
LLP**
77 Water Street, Suite 2100
New York, New York 10005
minyao.wang@lewisbrisbois.com
212.232.1300
Attorneys for Plaintiff Karen Cheung

TABLE OF CONTENTS

	<u>Page</u>
PRELIMINARY STATEMENT	1
BACKGROUND	1
ARGUMENT	3
A. Legal Standard	3
B. Plaintiff is Entitled to Default Judgment Against the Defaulting Defendants	3
CONCLUSION.....	4

TABLE OF AUTHORITIES

Page(s)

Cases

Colebrooke Theat. LLP v. Bibeau,
155 A.D.3d 581 (N.Y. App. Div. 2017) 3

Gantt v North Shore-LIJ Health Sys.,
140 A.D.3d 418 (1st Dept. 2016) 3

Statutes

federal Racketeer Influenced and Corrupt Organizations Act, 18 § U.S.C.
1961(c), (ii) 1

federal Securities Act of 1933, 15 § U.S.C. 77a et. seq. 2

RICO, 18 U.S.C. § 1961(d), (iii) 2

Soldiers and Sailors Relief Act of 1940 2

Other Authorities

CPLR 305(b) 1

CPLR §§ 308 and 311 3

CPLR § 3215..... 1, 3 - 4

Plaintiff Karen Cheung, a/k/a Wing Tsz Cheung (“Ms. Cheung”) by and through undersigned counsel, respectfully submits this Memorandum of Law in support of her Motion for Entry of Default Judgment against Defendants Securis Capital Limited (f/k/a Aeneas Capital Limited), Aeneas Management Limited, Kenrick Henry Fok, Darren Wang Yip Lui, Mandy Man Lok Lui, and Aeneas Group Limited (collectively the “Defaulting Defendants”), pursuant to CPLR § 3215 (the “Motion”) in the above-captioned matter.

PRELIMINARY STATEMENT

On June 24, 2024, Ms. Cheung, a citizen of Hong Kong and the United Kingdom, initiated this action under a Summons with Notice pursuant to CPLR 305(b).

The Defaulting Defendants, all based in Hong Kong, have been duly served with notice of this matter in accordance with Hong Kong law on service of process. The Defaulting Defendants have not appeared in this matter. Based on their failure to appear, the affidavits of service of the initiating Summons with Notice, the annexed affirmation of Minyao Wang dated December 31, 2024, (“Wang Aff.”), and the exhibits attached thereto, Ms. Cheung’s affirmation dated December 31, 2024, (“Cheung Aff.”), and the exhibits attached thereto, default judgment should be entered against the Defaulting Defendants pursuant to CPLR § 3215.

BACKGROUND

The Defaulting Defendants conspired to effect unauthorized purchases in Ms. Cheung’s name of the shares of Aptorum Group Limited.¹ Aptorum Group Limited is a Cayman registered, China based company. Its shares are on the NASDAQ Exchange under the symbol APM in New

¹ Aptorum Group Limited, which is traded on the NASDAQ Exchange under the symbol APM in New York City.

York City. The relief sought arises from : (i) violations of the federal Racketeer Influenced and Corrupt Organizations Act (“RICO”), 18 § U.S.C. 1961(c), (ii) conspiracy to violate RICO, 18 U.S.C. § 1961(d), (iii) fraud, (iii) breach of fiduciary duty, (iv) negligent misrepresentation, (v) unjust enrichment, (vi) civil conspiracy and (vii) violations of the federal Securities Act of 1933, 15 § U.S.C. 77a *et. seq.*

The Defaulting Defendants, among other means, (1) forged Ms. Cheung's signature, and (2) impersonated Ms. Cheung in telephone calls with a regulated Hong Kong securities broker to effect the unauthorized purchase of shares in Ms. Cheung's name as part of a pump-and-dump scheme, for the benefit of the Defaulting Defendants and ultimately, Aptorum Group Limited. *See* Cheung Aff., ¶ 10. As a result of the Defaulting Defendants actions, Ms. Cheung has suffered damages in excess of \$2,000,000. *See* Cheung Aff., ¶¶ 48-49.

On October 29, 2024, Ms. Cheung received Affidavits of Service for Kenrick Henry Fok, Aeneas Group Limited, Aeneas Management Limited, Securis Capital Limited, Darren Lui Wang Yip, Mandy Man Lok Lui, confirmation of service. *See* Wang Aff., ¶ 6. The Affidavits of Service note that each of the Defaulting Defendants were served on or about September 19, 2024. *See* Wang Aff., ¶ Exhibit 1.

The Defaulting Defendants have been in default since October 22, 2024. Defendants Kenrick Henry Fok, Darren Lui Wang Yip, and Mandy Man Lok Lui, being foreign nationals residing in Hong Kong, are not members of the United States Military for the purposes of the Soldiers and Sailors Relief Act of 1940. *See* Wang Aff., ¶ 10. Defendants Aeneas Group Limited, Aeneas Management Limited, and Securis Capital Limited are corporate entities and cannot be

members of the United States Military for the purposes of the Soldiers and Sailors Relief Act of 1940. Wang Aff., ¶ 11.

Despite having been duly served with notice of this instant action, the Defaulting Defendants have not appeared in this matter and the time within which to do so has since expired.

ARGUMENT

A. Legal Standard

Pursuant to CPLR § 3215(a), in the event that after being served with notice of an action a party fails to appear or otherwise plead therein, “the plaintiff may seek a default against him.” CPLR § 3215(a). The successful application for default will contain, at a minimum, the requisite proof of default including proof of service of initiating documents and proof of facts constituting the claim, the default, and the amount due. *See* CPLR § 3215(f), and *Gantt v North Shore-LIJ Health Sys.*, 140 A.D.3d 418 (1st Dept. 2016).

Service of the Summons with Notice was properly effectuated on the Defaulting Defendants pursuant to the Hong Kong Rules. Wang Aff., ¶¶ 6-7. Such service comports with CPLR §§ 308 and 311. *See Colebrooke Theat. LLP v. Bibeau*, 155 A.D.3d 581, 581 (N.Y. App. Div. 2017).

B. Plaintiff is Entitled to Default Judgment Against the Defaulting Defendants

The Defaulting Defendants have been duly served with the Summons with Notice in this instant action. Despite this fact, the Defaulting Defendant has failed to appear. The Plaintiff has submitted affidavits of service for all Defaulting Defendants in this action, sworn under penalty of perjury under New York law and which specify the time, date, and place that service was effectuated upon the Defaulting Defendants and therefore complies with CPLR §§ 308 and 311.

Wang Aff., ¶ 6. The Summons with Notice was also mailed to Defendants through first class international mail. Wang Aff., ¶ 8.

This motion is timely, as it has been brought within one year of the Defaulting Defendant's default. See CPLR § 3215(c), and see Wang Aff., ¶ 13.

Ms. Cheung has submitted sufficient proof via affirmation that she suffered damages in an amount of at least \$2,221,480.05. *See* CPLR § 3215(b); *see also* Cheung Aff., ¶¶ 48-49.

CONCLUSION

In light of the foregoing, the Plaintiff respectfully requests that this Court issue a default judgment pursuant to CPLR § 3215 against the Defaulting Defendants Securis Capital Limited (f/k/a Aeneas Capital Limited), Aeneas Management Limited, Kenrick Henry Fok, Darren Wang Yip Lui, Mandy Man Lok Lui, and Aeneas Group Limited for its failure to appear in this action in the amount of \$2,221,480.05, and costs and disbursements of this action, and granting such other and further relief as the Court finds just and appropriate under the circumstances.

DATED: January 6, 2025

Respectfully submitted,

LEWIS BRISBOIS BISGAARD & SMITH, LLP

By: /s/ Minyao Wang

Minyao Wang
NY State Bar No. 4744314
77 Water Street, Suite 2100
New York, New York 10005
minyao.wang@lewisbrisbois.com
212.232.1300
Attorneys for Plaintiff Karen Cheung

26

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Index No. 653165/2024

Plaintiff,

v.

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED,

**AFFIRMATION OF MINYAO WANG,
ESQ. IN SUPPORT OF PLAINTIFF
KAREN CHEUNG’S MOTION FOR
ENTRY OF DEFAULT JUDGMENT
AGAINST DEFENDANTS**

Defendants.

I, MINYAO WANG, an attorney admitted to practice before the courts of the State of New York,
affirm the following under the penalty of perjury:

1. I am a partner with the law firm Lewis Brisbois Bisgaard & Smith, LLP, counsel
for Plaintiff Karen Cheung in the above-captioned matter.¹

2. I am admitted to practice before the courts of the State of New York and am not a
party to this action.

3. I submit this affirmation pursuant to CPLR § 3215(f) and in support of the
Plaintiff’s Motion for Entry of Default Judgment Against Defendants Securis Capital Limited
(f/k/a Aeneas Capital Limited), Aeneas Management Limited, Kenrick Henry Fok, Darren Wang
Yip Lui, Mandy Man Lok Lui, and Aeneas Group Limited (collectively the “Defaulting
Defendants”), (the “Motion”). Ms. Cheung respectfully requests that default judgment be entered

¹ Any undefined capitalized terms used herein shall have the meanings ascribed to them in the Memorandum of Law
filed in support of the instant motion and which this Affidavit accompanies.

in her favor against all the Defaulting Defendants for the Defaulting Defendants' failure to make an appearance in this matter.

4. Plaintiff commenced this action *pro se* through the filing of a Summons with Notice on June 24, 2024.

5. All Defendants are located in Hong Kong. As such, pursuant to the Hague Convention, service was effectuated in Hong Kong in accordance with the laws of Hong Kong. Ms. Cheung received confirmation and accompanying proof of service of the Summons with Notice on the Defaulting Defendants through the affidavits of service collectively attached hereto and incorporated herein by reference as **Exhibit 1**.

6. The affidavits of service note that each of the Defaulting Defendants were served on September 19, 2024, to wit:

a. Defendant Securis Capital Limited (f/k/a Aeneas Capital Limited) was served via delivery of the Summons with Notice to the registered office of Securis Capital Limited on September 19, 2024. *See Ex. 1* at 2;

b. Defendant Aeneas Management Limited was served via delivery of the Summons with Notice to the registered office of Aeneas Management Limited on September 19, 2024. *See Ex. 1* at 3;

c. Defendant Kenrick Henry Fok was served via sealed envelope containing the Summons with Notice inserted in Kenrick Henry Fok's letterbox on September 19, 2024. *See Ex. 1* at 3-4;

d. Defendant Darren Wang Yip Lui was served via sealed envelope containing the Summons with Notice inserted in- the letterbox of Darren Lui Wang Yip on September 19, 2024. *See Ex. 1* at 5;

e. Defendant Mandy Man Lok Lui was served via sealed envelope containing the Summons with Notice inserted in Mandy Man Lok Lui's letterbox on September 19, 2024. *See Ex. 1* at 6-7; and

f. Defendant Aeneas Group Limited was served via delivery of the Summons with Notice to the registered office of Aeneas Group Limited on September 19, 2024. *See Ex. 1* at 8-9. Aeneas Group Limited was also served via sealed envelope containing the Summons with Notice inserted in the letterbox of Ng Wai Ip William. *See Ex. 1* at 8.

7. I have been advised that each of these services comport with applicable Hong Kong law, which in turn comports with the Hague Convention. *See Colebrooke Theat. LLP v. Bibeau*, 155 A.D.3d 581, 581 (1st Dep't 2017) (noting that service on Hong Kong defendants under the rules of Hong Kong was sufficient under New York law).

8. Consistent with CPLR § 3215(g)(4), on November 27, 2024, an additional copy of Summons with Notice was mailed to each Defendant to its last known address via First Class International Mail of the United States Post Office. *See Exhibit 2*.

9. None of the Defaulting Defendants has answered, responded, or otherwise appeared in this action.

10. Defendants Kenrick Henry Fok, Darren Lui Wang Yip, and Mandy Man Lok Lui are not members of the United States Military for the purposes of the Soldiers and Sailors Relief Act of 1940 ("SCRA") as they are citizens of the People's Republic of China and are residents of Hong Kong, China.

11. Defendants Aeneas Group Limited, Aeneas Management Limited, and Securis Capital Limited are corporate entities and cannot be members of the United States Military for the purposes of SCRA.

12. The Statute of Limitations under these claims has not run.

13. The Defaulting Defendants' time to answer, respond or otherwise appear has not been extended and less than a year has elapsed since its default. The Defaulting Defendants have been in default since October 22, 2024.

14. Accordingly, default judgment is appropriate in this action at this point.

I AFFIRM THIS SIXTH DAY OF JANUARY 2025, UNDER THE PENALTIES OF PERJURY UNDER THE LAWS OF NEW YORK, WHICH MAY INCLUDE A FINE OR IMPRISONMENT, THAT THE FOREGOING IS TRUE, AND I UNDERSTAND THAT THIS DOCUMENT MAY BE FILED IN AN ACTION OR PROCEEDING IN A COURT OF LAW.

DATED: January 6, 2025

By: /s/ MINYAO WANG
Minyao Wang

27

EXHIBIT 1

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Securis Capital Limited, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024, at around 4:44 p.m. I served Securis Capital Limited with a Summons with Notice dated 23rd June 2024 by leaving the same at Room 1009, 10th Floor, Office Plus @ Prince Edward, Nos. 794 – 802 Nathan Road, Kowloon, Hong Kong being the registered office of Securis Capital Limited.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

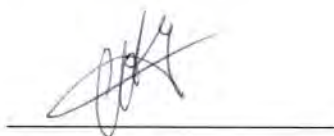
NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Aeneas Management Limited, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024, at about 4:32 p.m. I served Aeneas Management Limited with a Summons with Notice dated 23rd June 2024 by leaving the same at Unit 1404, 14th Floor, Cheung Fung Commercial Building, Nos. 21 – 25 Cheung Sha Wan Road, Kowloon, Hong Kong being the registered office of Aeneas Management Limited.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Kenrick Henry Fok, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 3:45 p.m. I served Kenrick Henry Fok with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Kenrick Henry Fok at Flat 5B, Choi Tien Mansion, 11 Tai Koo Wan Road, Taikoo Shing, Hong Kong.
4. At a subsequent time on the same day, i.e. at about 4:44 p.m. I arrived at Room 1009, 10th Floor, Office Plus @ Prince Edward, Nos. 794 – 802 Nathan Road, Kowloon, Hong Kong for the purpose of serving a Summons with Notice dated 23rd June 2024 on Kenrick Henry Fok. At that time, I was informed by a female adult that there was no such person named Kenrick Henry Fok in there. Then I left.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Lo Lok Lung, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Darren Lui Wang Yip, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 4:04 p.m., I served Darren Lui Wang Yip with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Darren Lui Wang Yip at Flat C, 24th Floor, Block 2, Scenecliff, Mid-levels, Hong Kong.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Lo Lok Lung

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

-----X
KAREN CHEUNG (a/k/a WING TSZ CHEUNG),
Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.
-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Lo Lok Lung, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Mandy Man Lok Lui, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 3:20 p.m. I arrived at the office of Blackrock, 16th Floor, Champion Tower, Three Garden Road, Central, Hong Kong for the purpose of serving a Summons with Notice dated 23rd June 2024 on Mandy Man Lok Lui. At that time, I was informed by a receptionist that she was on vacation until November 2024. Then Ms. Winnie Lau, the secretary of Mandy Man Lok Lui to receive the said documents on behalf of Mandy Man Lok Lui.
4. Subsequently on the same day at about 4:04 p.m. I served Mandy Man Lok Lui with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Mandy Man Lok Lui at Flat C, 24th Floor, Block 2, Scenecliff, Mid-levels, Hong Kong.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.

A handwritten signature in cursive script, appearing to read 'Lo Lok Lung', is written above a horizontal line.

Lo Lok Lung

SUPREME COURT OF THE STATE OF NEW YORK

COUNTY OF NEW YORK

-----X

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Plaintiff,

-against-

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED),

Defendants.

-----X

Index No. 653165/2024

NY Summons with Notice

**Plaintiff designates New York
County as place of trial**

**Venue is proper under CLPR
SS 503(a)**

1. I, Choi Ka Man, solemnly, sincerely and truly affirm as follows:
2. I was directed to serve Aeneas Group Limited, a Defendant with the summons with notice in Case No. 653165/2024 for the Supreme Court for the State of New York.
3. On Thursday, 19th September 2024 at about 3:08 p.m. I served Aeneas Group Limited with a Summons with Notice dated 23rd June 2024 by leaving the same at Unit 1306, 13th Floor, Nos. 93 – 103 Wing Lok Street, Sheung Wan, Hong Kong being the registered office of Aeneas Group Limited.
4. Afterwards, at about 5:40 p.m. on the same day I served Aeneas Group Limited with a Summons with Notice dated 23rd June 2024 by inserting the same enclosed in a sealed envelope through the letterbox belonging to the usual and last known address of Aeneas Group Limited, care of Ng Wai Ip William, at Room 1003, 10th Floor, Fu Yuen South Estate, Wong Tai Sin, Kowloon, Hong Kong.

I affirm this 29th day of October 2024, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Choi Ka Man

28

EXHIBIT 2

29

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Index No. 653165/2024

Plaintiff,

v.

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED,

Defendants.

**AFFIRMATION OF KAREN
CHEUNG (a/k/a) WING TSZ
CHEUNG IN SUPPORT OF
PLAINTIFF'S MOTION FOR ENTRY
OF DEFAULT JUDGMENT AGAINST
ALL DEFENDANTS**

HONG KONG SPECIAL ADMINISTRATIVE REGION
THE PEOPLE'S REPUBLIC OF CHINA:

I, Wing Tsz Cheung, a/k/a Karen Cheung, Plaintiff in the above-captioned matter, affirm the following under the penalty of perjury:

1. I am a citizen of the United Kingdom of Great Britain and Northern Ireland. I reside in Hong Kong, a Special Administrative Region of the People's Republic of China, and I am also a citizen of the Hong Kong Special Administrative Region. I received my higher education in both England and Hong Kong. My mailing address in New York is 1178 Broadway, 3rd Floor #1066, New York, NY 10001.

2. I submit this affirmation pursuant to CPLR § 3215(f) and in support of the Plaintiff's Motion for Entry of Default Judgment Against Defendants Securis Capital Limited (f/k/a Aeneas Capital Limited) ("ACL"), Aeneas Management Limited ("AML"), Kenrick Henry Fok ("Mr. Fok"), Darren Wang Yip Lui ("Mr. Lui"), Mandy Man Lok Lui ("Ms. Lui"), and Aeneas Group Limited (collectively the "Defaulting Defendants"), (the "Motion").

3. On June 24, 2024, this action was commenced by filing a Summons with Notice with this Court against all Defaulting Defendants.

4. This action stems from the Defaulting Defendants' conspiracy to effect unauthorized purchases of the shares of Aptorum Group Limited ("Aptorum") in my name. Aptorum is a Chinese company organized in the Cayman Islands. Shares of Aptorum are traded on the NASDAQ Exchange in New York City. Ian Huen ("Mr. Huen"), who I understand is a citizen of Hong Kong, controls Aptorum. Mr. Huen was the Chief Executive Officer and a Director of Aptorum during the relevant time period, and following a brief interlude between June 22, 2022 – November 27, 2023, Mr. Huen remains Aptorum's CEO. Mr. Huen works out of Aptorum's office in Manhattan, located at 1325 Avenue of the Americas, New York, New York, from time to time. *See e.g.*, Aptorum Group Limited, Report of Foreign Private Issuer on Form 6-K, filed with the SEC on November 30, 2023 attached hereto as **Exhibit A**.

5. Mr. Huen holds a controlling interest in Aeneas Group Limited. *See e.g.*, Aptorum Group Limited, Report of Foreign Private Issuer on Form 6-K, at F-14 filed with the SEC on December 20, 2024 attached hereto as **Exhibit B**. Upon information and belief, Aeneas Group Limited is the parent company of Defendant ACL so Mr. Huen controls Defendant ACL. I understand that Mr. Huen also holds a controlling interest in Defendant AML. *Id.* I understand that Defendant Fok resides in Hong Kong. It is my understanding that Defendant Fok has been designated by relevant Hong Kong authorities as a "Responsible Officer" of Defendant ACL. He was until December 2020 (after the conclusion of the misconduct at issue in this litigation) a director of Defendant ACL and remains to my knowledge a portfolio manager there. Mr. Fok is also a director of Defendant AML, and until May 2020 was a director of a wholly owned subsidiary of Aptorum, Aptus Management Limited, which is a Hong Kong corporation that provides

management services to Aptorum. *See e.g.*, Aptorum Group Limited, Registration Statement on Form F-1 at 119, filed with the SEC on September 11, 2020 attached hereto as **Exhibit C**. At the relevant time, Mr. Fok was also a director of Aeneas Technology (Hong Kong) Limited which held a contract research agreement with Aptorum's wholly owned subsidiary Aptorum Therapeutics Limited. *See e.g.*, Aptorum Group Limited, Registration Statement on Form F-1 at Ex. 10.40, "Contract Research Agreement between Aptorum Therapeutics Limited and Aeneas Technology (Hong Kong) Limited," filed with the SEC on September 11, 2020 2020 attached hereto as **Exhibit D**.

6. I understand that Defendant Darren Lui resides in Hong Kong. Mr. Lui and his family have a long standing association with Mr. Huen. Mr. Lui was a co-founder of Defendant ACL. *See e.g.*, Aptorum Group Limited, Annual Report on Form 20-F at 95 – 96, filed with the SEC on April 29, 2020 2020 attached hereto as **Exhibit E**. Mr. Lui and his family owned about 23 percent of the ACL's shares. Through an investment vehicle called CGY Investments Limited (which Mr. Lui owns 50 percent), the Lui family controls more than 15 percent of the shares of Aptorum. *Id.* at 107.

7. Mr. Lui was until June 2020 a director of AML. When the misconduct at issue in this litigation took place, Mr. Lui was Aptorum's President and Chief Business Officer. In June 2022, Mr. Lui succeeded Mr. Huen as Aptorum's Chief Executive Officer, Chief Accounting Officer and Executive Director.

8. Defendant Mandy Lui is a sister of Defendant Darren Lui. Ms. Lui is a well known person in the financial industry in Hong Kong. Ms. Lui owns 25 percent of CGY Investments Limited, the investment vehicle through which the Lui family exercises its shares in Aptorum. Ms. Lui works closely with her brother, Mr. Lui, and others regarding Aptorum matters. For example,

Ms. Lui is a director of CGY Investments Limited which executed a consultancy agreement with Aptorum under which it was paid HKD\$104,000 per month (approximately US\$13,333 per month). *See e.g.*, Aptorum Group Limited, Annual Report on Form 20-F at Ex. 4.44, “Consulting agreement with CGY Investment Limited effective on January 10, 2020,” filed with the SEC on April 29, 2020 attached hereto as **Exhibit F**.

9. The relief sought in this action arises from: (i) violations of the federal Racketeer Influenced and Corrupt Organizations Act (“RICO”), 18 § U.S.C. 1961(c), (ii) conspiracy to violate RICO, 18 U.S.C. § 1961(d), (iii) fraud, (iii) breach of fiduciary duty, (iv) negligent misrepresentation, (v) unjust enrichment, (vi) civil conspiracy and (vii) violations of the federal Securities Act of 1933, 15 § U.S.C. 77a et. seq.

10. The Defaulting Defendants, among other means, (1) forged my signature, and (2) impersonated me in multiple telephone calls with a regulated Hong Kong securities broker, to effect the unauthorized purchase of shares of Aptorum in my name as part of a pump-and-dump scheme, for the benefit of the Defaulting Defendants.

FACTUAL BACKGROUND

11. Defendant Fok, operating on behalf of the Defaulting Defendants, relentlessly pursued and pressured me to invest with and open an account with Aeneas Capital Limited. I met with Mr. Fok over lunch, on or about March 27, 2019, to discuss opening such an account as well as possible investments in certain stocks. Aptorum’s stock, however, was not discussed during this March 2019 meeting.

12. On or about April 23, 2019, I met Mr. Fok again at a coffee shop, where Mr. Fok represented to me that my client account with Aeneas Capital Limited would be established as an omnibus custodian account maintained by Aeneas Capital at Futu Securities International (the

“Omnibus Custodial Account”), a Hong Kong brokerage firm with a U.S. affiliate, for the benefit of Aeneas Capital’s clients (“FSI(HK)”).

13. Mr. Fok then requested that I issue a check for HK\$8 million (approximately \$1.2 million USD), payable to FSI(HK), allegedly for deposit into the Aeneas Capital Omnibus Custodial Account maintained at FSI(HK).

14. Immediately after the April 23, 2019 meeting, in reliance on Mr. Fok’s representations, I wrote a check in the amount of HK\$8 million to deposit into the Omnibus Custodial Account. I left the payee blank on the check, and I then gave the check to Mr. Fok who filled in the name of the payee as FSI(HK).

15. Unbeknownst to me—and contrary to the representations made by Mr. Fok at the April 23, 2019 meeting—Mr. Fok instead established a personal account at FSI(HK) in my name, without my authority, knowledge, or consent. Mr. Fok was acting in concert and at the direction of the Defaulting Defendants.

16. Between May 7, 2019, and June 14, 2019, acting at the direction of and on behalf of Defaulting Defendants, Mr. Fok caused the purchase of shares of Aptorum on the NASDAQ with my funds and without my knowledge, consent, or authorization, as follows:

Date	Shares Purchased ¹	Actual Amount Paid	Avg Price for Purchases	Total Volume ²	Percentage of Volume
5/7/2019	6,361.00	\$120,750.76	18.99	21,910.00	29.03%
5/8/2019	2.00	\$41.82	20.91	11,180.00	0.02%
5/9/2019	400.00	\$8,238.00	20.60	6,090.00	6.57%

¹ As of January 23, 2023 shares of Aptorum are trading on a 1-for-10 reverse stock split-adjusted basis. All tables in this Affirmation are based on the trading data that existed as of the time period relevant to this lawsuit. The historical data available through NASDAQ applies the split-adjusted basis to its historical data and therefore requires the viewer to adjust the “Avg Purchase Price” and “Total Volume” of the relevant time period by the corresponding single decimal place change affected by the 1-for-10 reverse stock split. *See* Press Release of Aptorum re: the stock split, available here: <https://ir.aptorumgroup.com/news-releases/news-release-details/aptorum-group-announces-1-10-reverse-stock-split> .

² *See* <https://www.nasdaq.com/market-activity/stocks/apm/historical> (source for historical data on “Total Volume”).

Date	Shares Purchased ¹	Actual Amount Paid	Avg Price for Purchases	Total Volume ²	Percentage of Volume
5/10/2019	1,555.00	\$33,152.68	21.28	4,530.00	34.33%
5/13/2019	2,677.00	\$54,837.80	20.49	9,420.00	28.42%
5/14/2019	355.00	\$7,452.40	20.97	7,420.00	4.78%
5/20/2019	2,200.00	\$53,135.03	24.21	9,510.00	23.13%
5/21/2019	498.00	\$12,110.40	24.20	7,630.00	6.53%
5/22/2019	299.00	\$7,367.36	24.64	7,960.00	3.76%
5/23/2019	2,000.00	\$51,200.00	25.60	8,390.00	23.84%
5/28/2019	682.00	\$19,812.10	29.05	14,840.00	4.60%
5/29/2019	4,749.00	\$138,587.21	29.20	13,000.00	36.53%
5/30/2019	1,500.00	\$43,785.00	29.19	5,000.00	30.00%
5/31/2019	355.00	\$10,614.50	29.90	17,390.00	2.04%
6/3/2019	100.00	\$3,282.00	32.82	19,630.00	0.51%
6/4/2019	705.00	\$23,131.55	32.68	11,510.00	6.13%
6/5/2019	106.00	\$3,448.09	32.47	5,590.00	1.90%
6/6/2019	1,470.00	\$47,934.38	32.59	7,880.00	18.65%
6/7/2019	1,003.00	\$32,074.14	31.91	4,170.00	24.05%
6/10/2019	160.00	\$4,760.00	30.06	7,150.00	2.24%
6/11/2019	102.00	\$3,057.48	29.82	5,730.00	1.78%
6/12/2019	452.00	\$12,656.04	28.35	8,110.00	5.57%
6/13/2019	100.00	\$2,080.00	20.80	11,670.00	0.86%
6/14/2019	1.00	\$22.30	22.30	13,930.00	0.01%

17. All of the purchases of the Aptorum Shares between May 7, 2019, and June 14, 2019, were made on the NASDAQ and cleared through a U.S. affiliate of FSI(HK) known as Futu Clearing Inc. (“FCI”). FCI is a corporation organized under Delaware law, with its principal place of business in Dallas, Texas.

18. The rapid-fire purchase of Aptorum shares by Mr. Fok, acting on behalf of the Defaulting Defendants, caused the price of Aptorum stock to nearly double: from \$18.99 per share to \$32.68 per share in just four weeks time. This had a number of positive financial and economic benefits for the Defaulting Defendants and others.

I Learn of the Unauthorized Purchases of Aptorum

19. On or about June 12, 2019, as part of the Defaulting Defendants effort to legitimize this unauthorized trading in Aptorum shares in my account after the fact, Mr. Fok caused ACL to provide to me the procedure to place orders for Aptorum by e-mail.

20. I had never issued any orders for the purchase of Aptorum Shares to ACL, nor did I subsequently provide any orders for the purchase of Aptorum Shares. Accordingly, I immediately contacted Mr. Fok via WhatsApp to ask about my account status at ACL.

21. Between June 14, 2019, and June 23, 2019—and for the first time—Mr. Fok informed me via WhatsApp that he had directed that my funds be applied to purchase Aptorum shares. At this time Mr. Fok did not provide details as to how much of my funds he had used, or how many shares he had purchased in my account.

22. On June 23, 2019, I asked Mr. Fok for account statements. I thereafter contacted Mr. Fok via WhatsApp to determine my account status. Mr. Fok responded via WhatsApp that ACL had prepared monthly statements and that he would send one to me soon.

23. On or about June 24, 2019, I again communicated with Mr. Fok via WhatsApp and demanded to see my account statements for April and May 2019. Mr. Fok replied the same day to me via WhatsApp that statements were being prepared, including one through June 2019, and would be delivered to me soon.

24. I replied the same day by WhatsApp instructing Mr. Fok to begin selling my Aptorum shares immediately.

25. On or about June 27, 2019, I finally received an account statement for May 2019, which purported to be for my account with ACL.

26. Also on or about June 27, 2019, after I received the May 2019 account statement, I contacted Mr. Lui via text message to ask when I would be able to sell my shares of Aptorum. Mr. Lui suggested in response that I hold my Aptorum Shares for several more months.

27. On or about June 28, 2019, Mr. Fok advised me via WhatsApp that I would soon be receiving the account statement for June 2019. Several days later, on or about July 4, 2019, I received a June 2019 account statement, which purported to be for my account with ACL. For the first time, I learned that the Defaulting Defendants had caused the purchase of 27,832 Aptorum shares with my funds.

28. On or about July 14, 2019, I asked Mr. Fok via WhatsApp whether he had successfully sold the Aptorum shares in my account. Mr. Fok responded via WhatsApp with an ambiguous answer. I then had a call with Mr. Fok two days later, on or about July 16, 2019, at which time I again instructed Mr. Fok to sell all of the Aptorum shares purchased into my account, and to fully refund my deposit of HK\$8 million.

**Defaulting Defendants Ignore My Instructions and Continue
Purchasing Aptorum Shares Without My Knowledge or Authorization**

29. Rather than following the clear instructions I gave between June 24, 2019, and July 16, 2019 (detailed above) to sell the Aptorum shares and refund my deposit as he was required to do, Mr Fok—as an integral part of the Defaulting Defendants’ plan to inflate and maintain the price of Aptorum shares—acting at the direction and on behalf of the Defaulting Defendants continued to execute his plan and purchased an additional 2,245 Aptorum Shares on the NASDAQ using my funds, again, without my knowledge, authorization or consent:

Date	Shares Purchased	Actual Amount Paid	Avg Price for Purchases	Total Volume	Percentage of Volume
7/10/2019	450.00	\$10,295.33	22.88	4,300.00	10.47%

7/19/2019	161.00	\$3,559.92	22.02	2,040.00	7.89%
7/22/2019	470.00	\$10,428.48	22.14	4,380.00	10.73%
7/23/2019	306.00	\$6,671.50	21.77	2,050.00	14.93%
7/25/2019	120.00	\$2,654.40	22.12	980.00	12.24%
8/13/2019	75.00	\$1,185.00	15.80	4,050.00	1.85%
8/21/2019	163.00	\$2,575.40	15.80	730.00	22.33%
9/6/2019	500.00	\$7,900.00	15.80	20,280.00	2.47%

30. It is my understanding that all of the purchases of the Aptorum Shares between July 10, 2019, and September 6, 2019, made on the NASDAQ were cleared through FCI. Not one of them had been authorized by me, and I remained unaware of them.

31. Following my repeated requests to liquidate my account with ACL, the Defaulting Defendants (rather than complying with my instructions) proposed to enter into a purported settlement arrangement with me. The proposed terms were as follows:

I would continue on with the client agreement with ACL and in exchange, Mr. Fok and ACL would:

- a. cause my uninvested cash balance of approximately HK\$2 million (approximately U.S. \$255,242) to be returned to me;
- b. ACL would loan me HK\$2 million at the annual interest rate of 1 percent, which supposedly would substantially or completely cover the difference between the then-prevailing market price of my Aptorum shares and the exercise price of a put option in Aptorum shares to be granted to me;
- c. the Loan would only become repayable when the share price of Aptorum shares reached US \$24.56, so that I would be able to liquidate the 30,077 Aptorum shares held at ACL at an average price of US \$24.56, and thus recover at a minimum my initial investment of approximately HK\$5.788 million (US \$738,691.12);
- d. As additional consideration, Mr. Fok would arrange for a put option to be granted to me, which would provide me the option to sell the 30,077 Aptorum Shares at US \$16.09 per share (the equivalent of approximately HK \$3.792 million or US \$483,938.93) in total (“the Put Option”).

- e. ACL and Mr. Fok would pass authority and control over the account held at FSI (HK) to me (together, the “Settlement”).

32. The Settlement supposedly would allow me to recover my investment of HK\$8 million fully, including by covering the mark-to-market loss on the Aptorum Shares (approximately HK\$2 million (or approximately US\$255,242.03) in September 2019).

33. In reliance on these representations and promises from the Defaulting Defendants, I entered into a number of agreements embodying the terms of the Settlement Agreement with, among others, the Defaulting Defendants.

34. On or about January 6, 2020, Aptorum filed a Form F-3 Registration Statement and Prospectus with the SEC concerning a proposed February 2020 Direct Offering.

35. The closing price for Aptorum on the NASDAQ on February 25, 2020, was US \$14.40 per share. The February 2020 Direct Offering closed on or about February 28, 2020, at a combined purchase price for the shares and warrants to purchase shares of US \$7.40.³ Accordingly, the February 2020 Stock Offering was heavily discounted, at almost half the market price at the time, and as a direct result the price per share of Aptorum shares dropped steeply, directly causing me to suffer further damages.

36. On or about February 27, 2020, I approached Mr. Fok about exercising the Put Option of the Settlement early and getting my money back. Mr. Fok told me that Aptorum had announced a direct offering the day before that had made many people unhappy, and informed me in any event I would not be able to exercise the Put Option for two years.

³ See [Aptorum Group Limited Class A Ordinary Shares \(APM\) Historical Data | Nasdaq](#); February 28, 2020 Press Release, available at [Aptorum Group Announces Closing of \\$10 Million Registered Direct Offering of Class A Ordinary Shares and Warrants | Aptorum Group Limited](#).

37. On or about June 7, 2020, I e-mailed Mr. Fok to stress my disappointment that he had invested my funds without my consent, into the stock of a single, illiquid company at a very high price, *i.e.*, Aptorum. I further informed Mr. Fok of my growing suspicion that the Aptorum share purchase had been a fraudulent scheme from the beginning. I then demanded a certificate of incumbency for the grantor of the Put Option. Mr. Fok, however, did not respond to this e-mail.

38. After I contacted Mr. Fok on June 10 and 11, 2020, demanding that he respond to my request for information concerning the grantor of the Put Option, Mr. Fok finally responded saying that he had forwarded my communications with him to “legal,” and that he would respond the following week.

39. On or about June 16, 2020, in what was a transparent attempt at delay, I received a letter from the Hong Kong law firm of So, Lung & Associates, attorneys for ACL, stating that the firm would respond to my request in two weeks. I contacted Mr. Fok via WhatsApp to protest this unreasonable additional delay.

40. On or about June 19, 2020, I received a second letter from So, Lung & Associates law firm stating, among other things, that ACL refused to provide information to me concerning the Put Notice grantor and suggesting that I contact the grantor directly, in a further attempt to delay my exercise of my Put Option.

I Discovered That My Account Was Fraudulently Opened By the Defaulting Defendants

41. The June 19, 2020 letter from So, Lung & Associates referred to the my account at FSI(HK) as my “personal” account. This was the first time that I became aware that a direct, personal account had been opened in my name, instead of a custodial account at FSI(HK) under ACL’s name which was what I agreed to.

42. To investigate this disturbing piece of information, on or about June 22, 2020, I visited one of FSI(HK)'s branch offices, where an FSI(HK) representative provided me with copies of the transaction records and an "Account Opening Form" for the FSI(HK) Account. To my shock and dismay, I discovered on the Account Opening Form a contact telephone number and an e-mail address that did not belong to me. Moreover, the signature on the form had been forged.

43. The Account Opening Form also contained a witness signature section, which stated that it was to be completed and signed only by a member of FSI(HK)'s staff. The signature of the witness on the Account Opening Form confirmed that the FSI(HK) staff member witnessed the prospective customer's signature and verified the customer's identity. The Account Opening Form indicated that the witness was Mr. Fok, indicating that Mr. Fok was a member of FSI(HK)'s staff.

44. On or about June 23, 2020, I reported the matter to the police in Hong Kong.

45. To further investigate the matter, I met with a Compliance Officer at FSI(HK)'s main Hong Kong office on or about August 13, 2020. The Compliance Officer informed me that, as part of FSI(HK)'s Know Your Customer ("KYC") procedure, FSI(HK) had contacted the purported holder of my account via telephone on several occasions in April and May 2019 and that the conversations were recorded.

46. On or about August 13, 2020, I listened to three of those recordings. I determined that the woman on the recordings purporting to be me was not, in fact, me. I immediately informed the Compliance Officer of this deception. Moreover, the Compliance Officer confirmed to Plaintiff that Mr. Fok had never been a member of FSI(HK)'s staff.

47. In connection with litigation I commenced in Hong Kong concerning this matter, FSI(HK) produced to me four additional recordings of conversations between FSI(HK) and the same woman pretending to be me.

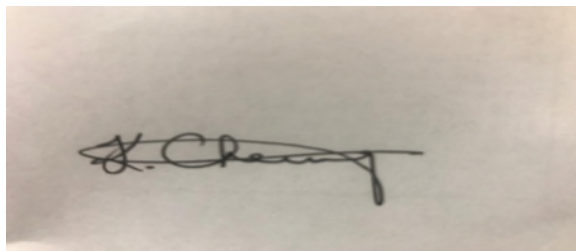
48. As a direct and proximate result of the foregoing fraud, I have suffered damages in the amount of at least \$740,493.35, from the fraudulent share purchases. I understand that under applicable provisions of the federal RICO statute, I may be entitled to treble damages. Therefore, I am entitled to recover damages in the amount of at least \$2,221,480.05 from the Defaulting Defendants. I therefore am seeking this amount plus statutory costs as set forth in the attached Bill of Costs.

49. In addition, I understand that I am entitled to recover reasonable attorneys' fees and costs incurred in connection with the Defaulting Defendants' misconduct. I therefore respectfully request that this Court put this matter down for an inquest to determine the amount of reasonable attorneys' fees and costs that I am entitled to.

I AFFIRM ON THIS SECOND DAY OF JANUARY 2025, UNDER THE PENALTIES OF PERJURY UNDER THE LAWS OF NEW YORK, WHICH MAY INCLUDE A FINE OR IMPRISONMENT, THAT THE FOREGOING IS TRUE, AND I UNDERSTAND THAT THIS DOCUMENT MAY BE FILED IN AN ACTION OR PROCEEDING IN A COURT OF LAW.

DATED: January 2, 2025

By:

A photograph of a handwritten signature in black ink on a light-colored surface. The signature is stylized and appears to read 'W. Cheung'.

Wing Tsz "Karen" Cheung

30

6-K 1 ea189275-6k_aptorum.htm REPORT OF FOREIGN PRIVATE ISSUER

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of November 2023

Commission File Number: 001-38764

APTORUM GROUP LIMITED

17 Hanover Square
London W1S 1BN, United Kingdom
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F ☒ Form 40-F ☐

On November 27, 2023, Mr. Darren Lui resigned from his position as Aptorum Group Limited's (the "Company") Chief Executive Officer, Chief Accounting Officer and as an Executive Director of the Board of Directors, to focus on his personal goals and pursuits. On November 30, 2023, Dr. Clark Cheng also resigned from his position as the Company's Chief Medical Officer and as an Executive Director of the Board of Directors, to focus on his personal goals and pursuits. Mr. Ian Huen, one of the Company's directors, who also served as the Company's Chief Executive Officer from October 2017 until his prior resignation in June 2022, will step back into the role of Chief Executive Officer. Neither Mr. Lui or Dr. Cheng's resignation was a result of any disagreement with the Company relating to its operations, policies or practices. The Board is grateful for Mr. Lui and Dr. Cheng's significant contribution to the Company over the years, and expresses its gratitude for their dedicated service to the Company during their tenures.

The Board is excited to have Mr. Huen back as Chief Executive Officer and welcomes him to his new role. Mr. Huen helped the Company through many significant events and is sure to help the Company reach its full potential.

The information in this Form 6-K shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

This Form 6-K is hereby incorporated by reference into the registration statements of the Company on [Form S-8](#) (Registration Number 333-232591) and [Form F-3](#) (Registration Number 333-268873) and into each prospectus outstanding under the foregoing registration statements, to the extent not superseded by documents or reports subsequently filed or furnished by the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Aptorum Group Limited

Date: November 30, 2023

By: /s/ Ian Huen
Name: Ian Huen
Title: Chief Executive Officer

31

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of December 2024

Commission File Number: 001-38764

Aptorum Group Limited

17 Hanover Square
London W1S 1BN, United Kingdom
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F ☒ Form 40-F ☐

EXPLANATORY NOTE

Aptorum Group Limited (the “Company”) is furnishing this Form 6-K to provide six-months interim consolidated financial statements ended June 30, 2024 and to incorporate such consolidated financial statements into the Company’s registration statements referenced below. The Company also issued a press release which is attached hereto as Exhibit 99.3.

This Form 6-K is hereby incorporated by reference into the registration statements of the Company on [Form S-8](#) (Registration Number 333-232591) and [Form F-3](#) (Registration Number 333-268873) and into each prospectus outstanding under the foregoing registration statements, to the extent not superseded by documents or reports subsequently filed or furnished by the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

Financial Statements and Exhibits.

Exhibits.

The following exhibits are attached.

Exhibit	Description
99.1	Unaudited Interim Consolidated Financial Statements as of June 30, 2024 and December 31, 2023, and for the Six Months Ended June 30, 2024 and 2023
99.2	Operating and Financial Review and Prospects in Connection with the Unaudited Interim Consolidated Financial Statements for the Six Months Ended June 30, 2024 and 2023
99.3	Press Release
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: December 20, 2024

Aptorum Group Limited

By: /s/ Ian Huen

Ian Huen

Chief Executive Officer

Financial Statements

Table of Contents

Unaudited Condensed Consolidated Balance Sheets as of June 30, 2024 and December 31, 2023	F-2
Unaudited Condensed Consolidated Statements of Operations and Comprehensive Loss for the six months ended June 30, 2024 and 2023	F-3
Unaudited Condensed Consolidated Statements of Changes in Equity for the six months ended June 30, 2024 and 2023	F-4
Unaudited Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2024 and 2023	F-5
Notes to Unaudited Condensed Consolidated Financial Statements	F-6

APTORUM GROUP LIMITED
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
June 30, 2024 and December 31, 2023
(Stated in U.S. Dollars)

	June 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash	\$ 783,085	\$ 2,005,351
Accounts receivable	21,800	47,709
Amounts due from related parties	3,595	961
Other receivables and prepayments	725,616	422,071
Total current assets	1,534,096	2,476,092
Property and equipment, net	-	1,663,926
Operating lease right-of-use assets	-	182,057
Long-term investments	16,098,846	16,098,846
Intangible assets, net	-	147,347
Long-term deposits	71,823	71,823
Total Assets	\$ 17,704,765	\$ 20,640,091
LIABILITIES AND EQUITY		
LIABILITIES		
Current liabilities:		
Amounts due to related parties	\$ 79,180	\$ 79,180
Accounts payable and accrued expenses	1,148,235	1,894,341
Operating lease liabilities, current	89,145	125,232
Total current liabilities	1,316,560	2,098,753
Operating lease liabilities, non-current	62,718	99,485
Convertible notes to a related party	3,148,500	3,058,500
Total Liabilities	\$ 4,527,778	\$ 5,256,738
Commitments and contingencies	-	-
EQUITY		
Class A Ordinary Shares (\$0.00001 par value, 9,999,996,000,000 shares authorized, 3,674,164 shares issued and outstanding as of June 30, 2024; 2,937,921 shares issued and outstanding as of December 31, 2023)	\$ 37	\$ 31
Class B Ordinary Shares (\$0.00001 par value; 4,000,000 shares authorized, 1,796,934 shares issued and outstanding as of June 30, 2024; 2,243,776 shares issued and outstanding as of December 31, 2023)	18	22
Additional paid-in capital	93,470,186	93,018,528
Accumulated other comprehensive loss	(9,762)	(10,623)
Accumulated deficit	(70,805,518)	(68,161,722)
Total equity attributable to the shareholders of Aptorum Group Limited	22,654,961	24,846,236
Non-controlling interests	(9,477,974)	(9,462,883)
Total equity	13,176,987	15,383,353
Total Liabilities and Equity	\$ 17,704,765	\$ 20,640,091

See accompanying notes to the unaudited condensed consolidated financial statements.

APTORUM GROUP LIMITED
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
For the six months ended June 30, 2024 and 2023
(Stated in U.S. Dollars)

	For the six months ended June 30,	
	2024	2023
Revenue		
Healthcare services income	\$ -	\$ 431,378
Operating expenses		
Costs of healthcare services	-	(426,063)
Research and development expenses	(2,038,923)	(3,212,366)
General and administrative fees	(326,187)	(1,263,019)
Legal and professional fees	(366,164)	(1,738,566)
Other operating expenses	(137,233)	(330,212)
Total operating expenses	(2,868,507)	(6,970,226)
Other income (expenses)		
Loss on investments in marketable securities, net	-	(9,266)
Interest expense, net	(68,462)	(93,478)
Loss on disposal of subsidiaries	(4,271)	-
Sundry income	282,353	36,803
Total other income (expenses), net	209,620	(65,941)
Net loss	<u>\$ (2,658,887)</u>	<u>\$ (6,604,789)</u>
Less: net loss attributable to non-controlling interests	(15,091)	(1,117,685)
Net loss attributable to Aptorum Group Limited	<u>\$ (2,643,796)</u>	<u>\$ (5,487,104)</u>
Net loss per share – basic and diluted	\$ (0.50)	\$ (1.43)
Weighted-average shares outstanding – basic and diluted	<u>5,339,608</u>	<u>3,849,621</u>
Net loss	<u>\$ (2,658,887)</u>	<u>\$ (6,604,789)</u>
Other comprehensive income (loss)		
Exchange differences on translation of foreign operations	861	(7,485)
Other comprehensive income (loss)	861	(7,485)
Comprehensive loss	<u>(2,658,026)</u>	<u>(6,612,274)</u>
Less: comprehensive loss attributable to non-controlling interests	(15,091)	(1,117,685)
Comprehensive loss attributable to the shareholders of Aptorum Group Limited	<u>(2,642,935)</u>	<u>(5,494,589)</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

APTORUM GROUP LIMITED
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
For the six months ended June 30, 2024 and 2023
(Stated in U.S. Dollars)

	Class A Ordinary Shares		Class B Ordinary Shares		Additional Paid-in Capital	Accumulated deficit	Accumulated other comprehensive (loss) income	Non- controlling interests	Total
	Shares	Amount	Shares	Amount	Amount	Amount	Amount	Amount	Amount
Balance, January 1, 2024	2,937,921	\$ 31	2,243,776	\$ 22	\$ 93,018,528	\$ (68,161,722)	\$ (10,623)	\$ (9,462,883)	\$ 15,383,353
Conversion of Class B Ordinary Shares to Class A Ordinary Shares	446,842	4	(446,842)	(4)	-	-	-	-	-
Net loss	-	-	-	-	-	(2,643,796)	-	(15,091)	(2,658,887)
Exercise of share options	289,401	2	-	-	451,658	-	-	-	451,660
Exchange difference on translation of foreign operations	-	-	-	-	-	-	861	-	861
Balance, June 30, 2024	3,674,164	\$ 37	1,796,934	\$ 18	\$ 93,470,186	\$ (70,805,518)	\$ (9,762)	\$ (9,477,974)	\$ 13,176,987
Balance, January 1, 2023	1,326,953	\$ 13,269,528	2,243,776	\$ 22,437,754	\$ 45,308,080	\$ (65,337,075)	\$ 33,807	\$ (7,878,789)	\$ 7,833,305
Adjustment for change of par value	-	(13,269,514)	-	(22,437,732)	35,707,246	-	-	-	-
Issuance of shares to non- controlling interest	-	-	-	-	67,766	-	-	(67,766)	-
Net loss	-	-	-	-	-	(5,487,104)	-	(1,117,685)	(6,604,789)
Share-based compensation	-	-	-	-	711,918	-	-	-	711,918
Issuance of shares in exchange of share options and settlement of liabilities	70,430	1	-	-	3,078,195	-	-	-	3,078,196
Issuance of shares for share-based compensation	65,770	1	-	-	176,263	-	-	-	176,264
Issuance of shares	215,959	2	-	-	1,575,560	-	-	-	1,575,562
Exercise of share options	791	-	-	-	16,506	-	-	-	16,506
Exercise of convertible notes	1,250,000	13	-	-	5,999,987	-	-	-	6,000,000
Rounding up for reverse stock split	8,018	-	-	-	-	-	-	-	-
Exchange difference on translation of foreign operations	-	-	-	-	-	-	(7,485)	-	(7,485)
Balance, June 30, 2023	2,937,921	\$ 31	2,243,776	\$ 22	\$ 92,641,521	\$ (70,824,179)	\$ 26,322	\$ (9,064,240)	\$ 12,779,477

See accompanying notes to the unaudited condensed consolidated financial statements.

APTORUM GROUP LIMITED
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
For the six months ended June 30, 2024 and 2023
(Stated in U.S. Dollars)

	For the six months ended June 30,	
	2024	2023
Cash flows from operating activities		
Net loss	\$ (2,658,887)	\$ (6,604,789)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization and depreciation	255,046	670,648
Share-based compensation	-	711,918
Issuance of shares for share-based compensation	-	176,264
Loss on investments in marketable securities, net	-	9,266
Gain on disposal of fixed assets	(58,621)	(11,720)
Impairment loss on long-lived assets	1,699,481	750,381
Impairment loss on inventories	-	17,124
Impairment loss on receivables	7,636	-
Operating lease cost	45,167	190,040
Interest income	-	(57,468)
Interest expense	90,000	58,288
Reversal of deferred cash bonus	-	(1,646,228)
Changes in operating assets and liabilities:		
Accounts receivable	18,273	108,030
Inventories	-	10,598
Other receivables and prepayments	(303,545)	(65,477)
Long-term deposits	-	29,106
Amounts due from related parties	(2,634)	48,403
Amounts due to related parties	-	191
Accounts payable and accrued expenses	(292,788)	(405,603)
Operating lease liabilities	(80,015)	(182,060)
Net cash used in operating activities	(1,280,887)	(6,193,088)
Cash flows from investing activities		
Loan to related parties	-	(92,459)
Loan repayment from a related party	-	545,615
Purchases of property and equipment	-	(2,975)
Proceeds from sale of marketable securities	-	93,215
Proceeds from disposal of fixed assets	58,621	15,385
Net cash provided by investing activities	58,621	558,781
Cash flows from financing activities		
Loan from banks	-	-
Repayment of bank loan	-	(3,000,000)
Issuance of convertible notes	-	3,000,000
Settlement of loan from a related party	-	(3,000,000)
Exercise of options and warrants	-	16,506
Loan from a related party	-	2,500,000
Proceeds from issuance of Class A Ordinary Shares, net	-	1,575,562
Net cash provided by financing activities	-	1,092,068
Net decrease in cash and restricted cash	(1,222,266)	(4,542,239)
Cash and restricted cash- Beginning of period	2,005,351	5,012,880
Cash and restricted cash - End of period	\$ 783,085	\$ 470,641
Supplemental disclosures of cash flow information		
Interest paid	\$ -	\$ 94,108
Income taxes paid	\$ -	\$ -
Non-cash operating, investing and financing activities		
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ -	\$ 338,525
Convertible notes converted to Class A Ordinary Shares	\$ -	\$ 6,000,000
Settlement of deferred cash bonus by issuance of share options or shares	\$ 451,660	3,078,196
Reconciliation of cash and restricted cash		
Cash	\$ 783,085	\$ 340,306
Restricted cash	-	130,335
Total cash and restricted cash shown on the unaudited condensed consolidated statements of cash flows	\$ 783,085	\$ 470,641

See accompanying notes to the unaudited condensed consolidated financial statements.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

1. ORGANIZATION

The unaudited condensed consolidated financial statements include the financial statements of Aptorum Group Limited (the “Company”) and its subsidiaries and variable interest entities (“VIEs”) of which the Company is the primary beneficiary (collectively the “Group”).

The Company, formerly known as APTUS Holdings Limited and STRIKER ASIA OPPORTUNITIES FUND CORPORATION, is a company incorporated on September 13, 2010 under the laws of the Cayman Islands with limited liability.

The Company researches and develops life science and biopharmaceutical products within its wholly-owned subsidiary, Aptorum Therapeutics Limited, formerly known as APTUS Therapeutics Limited (“Aptorum Therapeutics”) and its indirect subsidiary companies (collectively, “Aptorum Therapeutics Group”).

2. GOING CONCERN

The Group reported a net loss of \$2,658,887 and net operating cash outflow of \$1,280,887 for the six months ended June 30, 2024. In addition, the Group had an accumulated deficit of \$70,805,518 as of June 30, 2024. The Group’s operating results for future periods are subject to numerous uncertainties and it is uncertain if the Group will be able to reduce or eliminate its net losses for the foreseeable future. If management is not able to generate significant revenues from its product candidates currently in development, the Group may not be able to achieve profitability.

In additions, the Group terminated the Agreement and Plan of Merger dated March 1, 2024 (the “Merger Agreement”) which originally aimed to facilitate the reverse takeover of YOOV resulting in YOOV becoming the major shareholder of the Group upon completion. This termination, together with recurring net losses and net operating cash outflow, may raise substantial doubt about the Group’s ability to continue as a going concern.

The Group’s liquidity is based on its ability to enhance its operating cash flow position, obtain capital financing from equity interest investors and borrow funds to fund its general operations and capital expenditure. The Group will need to maintain its operating costs at a level through strict cost control and budget, such as staff reduction, to ensure operating costs are minimized and will not exceed such aforementioned sources of funds to continue as a going concern for a period within 12 months after the issuance of its unaudited condensed consolidated financial statements. The Group’s ability to continue as a going concern is dependent on management’s ability to execute its business plan successfully.

If the Group determines that its cash requirements exceed the amount of cash and cash equivalents the Group has at the time, the Group may seek to issue equity or debt securities or obtain credit facilities. The issuance and sale of additional equity or convertible debts would result in further dilution to its shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating covenants that might restrict its operations. The Group cannot assure that the financing will be available in amounts or on terms acceptable to the Group, if at all. However, the management plans cannot alleviate the substantial doubt of the Group’s ability to continue as a going concern. There can be no assurance that the Group will be successful in achieving its strategic plans, that the Group’s future capital raises will be sufficient to support its ongoing operations, or that any additional financing will be available in a timely manner or with acceptable terms, if at all. If the Group is unable to raise sufficient financing or events or circumstances occur such that the Group does not meet its strategic plans, the Group will be required to reduce certain discretionary spending, alter or scale development programs, or be unable to fund capital expenditures, which would have a material adverse effect on the Group’s financial position, results of operations, cash flows, and ability to achieve its intended business objectives.

The accompanying unaudited condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Accordingly, the unaudited condensed consolidated financial statements have been prepared on a basis that assumes the Group will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of presentation and consolidation

The unaudited condensed consolidated financial statements of the Group are presented on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) for interim financial information, and with the rules and regulations of the United States Securities and Exchange Commission (the “SEC”). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. Unaudited interim results are not necessarily indicative of the results for the full fiscal year. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with audited consolidated financial statements and accompanying notes in the Company’s Annual Report on Form 20-F for the fiscal year ended December 31, 2023. The unaudited condensed consolidated financial statements include the accounts of the Company, its direct and indirect wholly and majority owned subsidiaries. In accordance with the provisions of Accounting Standards Codification (“ASC”) 810, Consolidation, the Group also consolidate any variable interest entity (“VIE”) of which the Company is the primary beneficiary. The Group do not consolidate a VIE in which the Company has a majority ownership interest when the Company is not considered the primary beneficiary. The Company has determined that the Company is not the primary beneficiary of one of the VIE (see Note 13, Variable Interest Entity). The Company evaluates its relationships with the VIE on an ongoing basis to determine whether it becomes the primary beneficiary. All material intercompany balances and transactions have been eliminated in preparation of the consolidated financial statements.

Use of estimates

The preparation of the unaudited condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements as well as income and expenses during the reporting period. Significant accounting estimates reflected in the Group’s unaudited condensed consolidated financial statements include fair value of long-term investments, fair value measurement for share options, impairment of long-lived assets, allowance for credit losses and valuation allowance for deferred tax assets. Actual results could differ from those estimates.

Impairment of long-lived assets

The Group prepares a qualitative assessment, and if necessary, a quantitative assessment, in determining whether long-lived assets may be impaired. The factors considered in the qualitative assessment include macroeconomic conditions, industry and market conditions and overall financial performance of the Group, among other factors. Under a quantitative assessment, the Group compares the carrying value of the long-lived assets to the estimated undiscounted future cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, the Group would recognize an impairment loss, which is the excess of carrying amount over the fair value of the assets, using the expected future discounted cash flows.

Long-term investments

The Group’s long-term investments consist of equity method investment in common stocks and non-marketable investments in non-redeemable preferred shares of privately-held companies that are not required to be consolidated under the variable interest or voting models. Long-term investments are classified as non-current assets on the unaudited condensed consolidated balance sheets as those investments do not have stated contractual maturity dates.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Non-marketable investments

The non-marketable equity securities not accounted for under the equity method are measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. Adjustments are determined primarily based on a market approach as of the transaction date. The Group also makes a qualitative assessment of whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, the Group has to estimate the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, the Group recognizes an impairment loss in earnings equal to the difference between the carrying value and fair value.

Equity method investment – Fair value option

The Group elects the fair value option for an investment that would otherwise be accounted for using the equity method of accounting. Such election is irrevocable and is applied on an investment by investment basis at initial recognition. The fair value of such investments is based on quoted prices in an active market, if any, or recent orderly transactions for identical or similar investment of the same issuer. Changes in the fair value of these equity method investments are recognized in other income (expenses), net in the unaudited condensed consolidated statement of operations and comprehensive loss.

Operating leases

At the inception of a contract, the Group determines if the arrangement is, or contains, a lease. Operating lease liabilities are recognized at lease commencement based on the present value of lease payments over the lease term. Operating lease right-of-use assets are initially measured at cost, which comprises the initial amount of the lease liability adjusted for lease payments made at or before the lease commencement date, plus any initial direct costs incurred and less any lease incentives received. As the rate implicit in the lease cannot be readily determined, the Group uses incremental borrowing rate at the lease commencement date in determining the imputed interest and present value of lease payments. The incremental borrowing rate is determined based on the rate of interest that the Group would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term in a similar economic environment. The lease term for all of the Group's leases includes the non-cancellable period of the lease plus any additional periods covered by either a Group's option to extend (or not to terminate) the lease that the Group is reasonably certain to exercise, or an option to extend (or not to terminate) the lease controlled by the lessor. For operating leases, the Group recognizes a single lease cost on a straight-line basis over the remaining lease term.

The Group has elected not to recognize right-of-use assets or lease liabilities for leases with an initial term of 12 months or less and the Group recognizes lease expense for these leases on a straight-line basis over the lease terms.

Revenue recognition

Revenues are derived from healthcare services rendered to patients for healthcare consultation and medical treatment. Revenue is reported at the amount that reflects the consideration to which the Group expects to be entitled in exchange for providing healthcare services.

The Group recognizes revenue as its performance obligations are completed. Healthcare services are treated as a single performance obligation satisfied at a point in time because the performance obligations are generally satisfied over a period of less than one day.

The Group determines the transaction price based on established billing rates. The Group considers the patient's ability and intent to pay the amount of consideration upon admission. Subsequent changes resulting from a patient's ability to pay are recorded as bad debt expense, which is included as a component of other operating expenses in the unaudited condensed consolidated statements of operations. During the six months ended June 30, 2024 and 2023, the bad debt expenses were \$7,636 and \$nil respectively.

Recently adopted accounting pronouncements

In June 2022, the FASB issued Accounting Standards Update ("ASU") 2022-03, "Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions", which clarifies that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The amendments also clarify that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. This guidance also requires certain disclosures for equity securities subject to contractual sale restrictions. The new guidance is required to be applied prospectively with any adjustments from the adoption of the amendments recognized in earnings and disclosed on the date of adoption. This guidance is effective for the Group for the year ending December 31, 2024. The Group does not expect that the adoption of this guidance will have a material impact on the Group's unaudited condensed consolidated financial statements.

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

Recently issued accounting standards which have not yet been adopted

In November 2023, the FASB issued ASU No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (“ASU 2023-07”). ASU 2023-07 expands public entities’ segment disclosures by requiring disclosure of significant segment expenses that are regularly provided to the chief operating decision maker and included within each reported measure of segment profit or loss, an amount and description of its composition for other segment items, and interim disclosures of a reportable segment’s profit or loss and assets. All disclosure requirements under ASU2023-07 are also required for public entities with a single reportable segment. The guidance is effective for the year ending December 31, 2024 and the subsequent interim periods. The Group expects the impact of adoption of this guidance to be limited to additional segment disclosures on the Group’s 2024 consolidated financial statements, and 2025 unaudited condensed consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09, “Income Taxes (Topic 740): Improvements to Income Tax Disclosures”, which improves income tax disclosures. The amendments require the disclosure of specific categories in the rate reconciliation and additional information for reconciling items that meet a quantitative threshold. The amendments also require disaggregated information about the amount of income taxes paid (net of refunds received), Income (or loss) from continuing operations before income tax expense (or benefit) and Income tax expense (or benefit) from continuing operations. The new guidance is required to be applied either prospectively or retrospectively. This guidance is effective for the Group for the year ending December 31, 2025. Management does not expect the adoption has material effect on the Group’s unaudited condensed consolidated financial statements.

4. REVENUE

For the six months ended June 30, 2023, all revenue came from provision of healthcare services in Hong Kong.

During the second quarter of 2023, the Group made a decision to streamline its operations by terminating clinic services and suspending non-lead R&D projects. No revenue was generated for the six months ended June 30, 2024.

5. INVESTMENT AND FAIR VALUE MEASUREMENT

Assets Measured at Fair Value on a Recurring Basis

The assets and liabilities carried at fair value measured on a recurring basis as of June 30, 2024 and December 31, 2023 were \$nil and \$nil respectively.

During the six months ended June 30, 2024 and 2023, there were no movement in Level 3 assets measured and recorded at fair value on a recurring basis.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Non-marketable investments

The Group’s non-marketable investments are investments in privately held companies without readily determinable fair values. The carrying value of the non-marketable investments are adjusted based on price changes from observable transactions of identical or similar securities of the same issuer (referred to as the measurement alternative) or for impairment if the carrying amount of the non-marketable investments may not be fully recoverable. Any changes in carrying value are recorded within other income (expenses), net in the unaudited condensed consolidated statements of operations and comprehensive loss.

During the six months ended June 30, 2024 and 2023, there were no movement in annual upward or downwards adjustments and impairment recorded in other income (expenses), net, and included as adjustments to the carrying value of non-marketable investments held as of June 30, 2024 and 2023 based on the observable price in an orderly transaction for the same or similar security of the same issuers.

During the six months ended June 30, 2023 and 2022, the Group did not sell any non-marketable investments or recorded any realized gains or losses for the non-marketable investments measured at fair value on a non-recurring basis.

The following table summarizes the total carrying value of the non-marketable investments held as of June 30, 2024 and December 31, 2023 including cumulative unrealized upward and downward adjustments and impairment made to the initial cost basis of the investments:

	June 30, 2024 (Unaudited)	December 31, 2023
Initial cost basis	\$ 4,079,707	\$ 4,079,707
Upward adjustments	12,539,960	12,539,960
Downward adjustments and impairment	(520,821)	(520,821)
Total carrying value at the end of the period	\$ 16,098,846	\$ 16,098,846

The Group did not transfer any non-marketable investments into marketable securities during the six months ended June 30, 2024 and 2023.

For the six months ended June 30, 2024 and year ended December 31, 2023, one of the non-marketable investments with initial cost of \$2.6 million and had a carrying value of \$15.1 million was pledged for a convertible note issued to a related party (Note 16).

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Equity method investment, fair value option

In December 2021, one of the Group’s subsidiaries, Libra Sciences Limited (“Libra”, formerly known as Aptorum Pharmaceutical Development Limited), issued Class A and Class B ordinary shares to various parties in exchange of licenses or cash. Each Class A share of Libra is entitled to 1 vote while each Class B share of Libra is entitled to 10 votes. Upon the share issuance, the Group was holding 97.27% economic interest and 31.51% voting power in Libra. The Group lost the controlling interest in Libra because it was transferred to a third party, and therefore deconsolidated Libra. However, the Group still owns 97.27% economic interest and 31.51% voting power, which is deemed as having significant influence over Libra. As a result, the Group’s investment in Libra is subject to the equity method of accounting. The Group assessed that the fair value option can better reflect the true value of Libra. Pursuant to ASC 825 – Financial Instruments (“ASC 825”), the Group elected to apply the fair value option for its investments in Libra and will remeasure its investments in Libra at fair value every reporting period. The Group has determined that the carrying value of the investment is not recoverable and this condition is determined to be other-than-temporary. Consequently, an impairment for the investment of \$77,200 has been recognized as of June 30, 2024 and December 31, 2023.

6. OTHER RECEIVABLES AND PREPAYMENTS

Other receivables and prepayments as of June 30, 2024 and December 31, 2023 consisted of:

	June 30, 2024 (Unaudited)	December 31, 2023
Prepaid research and development expenses	\$ 181,276	\$ 185,633
Prepaid insurance	145,662	33,815
Prepaid service fee	71,777	46,303
Rental deposits	11,967	102,109
Prepaid rental expenses	2,625	15,683
Receivables for reimbursement of reverse takeover related expenses	280,000	-
Other receivables	17,417	22,275
Others	14,892	16,253
	<u>\$ 725,616</u>	<u>\$ 422,071</u>

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

7. PROPERTY AND EQUIPMENT, NET

Property and equipment as of June 30, 2024 and December 31, 2023 consisted of:

	June 30, 2024	December 31, 2023
	(Unaudited)	
Computer equipment	\$ 69,291	\$ 81,138
Furniture, fixture, and office and medical equipment	32,435	150,292
Leasehold improvements	108,187	543,975
Laboratory equipment	4,335,722	4,336,764
Motor vehicle under finance leases	239,093	239,093
	4,784,728	5,351,262
Less: accumulated depreciation and impairment	4,784,728	3,687,336
Property and equipment, net	\$ -	\$ 1,663,926

Depreciation expenses for property and equipment amounted to \$235,827 and \$605,847 for the six months ended June 30, 2024 and 2023, respectively.

During the six months ended June 30, 2024, an impairment loss relating to laboratory equipment, computer equipment, and furniture, fixture, and office equipment amounted to \$1,421,782 and \$5,520 were recorded in research and development expenses and other operating expenses, respectively, as the Group considered that the carrying amount of these property and equipment may not be recoverable. During the six months ended June 30, 2023, an impairment loss relating to the office and medical equipment, and computer equipment related to the Hong Kong healthcare services amounted to \$28,128, was recorded in other operating expenses, as the Group considered that the carrying amount of these property and equipment may not be recoverable.

During the six months ended June 30, 2024 and 2023, gain on disposal of fixed assets of \$58,621 and \$11,720, respectively, were recorded in other operating expenses.

8. INTANGIBLE ASSETS, NET

Amortization expenses for intangible assets amounted to \$19,219 and \$64,801 for the six months ended June 30, 2024 and 2023, respectively.

During the six months ended June 30, 2024, an impairment loss amounted to \$128,128 was recognized in research and development expenses as the Group considered that the carrying amount of an intangible asset related to a patented license for a lead project may not be recoverable. During the six months ended June 30, 2023, an impairment loss amounted to \$519,496 was recognized in research and development expenses as the Group considered that the carrying amount of an intangible asset related to various patented licenses for non-lead projects may not be recoverable. Two of the license agreements were terminated in July 2023. Besides, an impairment loss related to the computer software for Hong Kong healthcare services amounted to \$1,841 was recorded in other operating expenses, as the Group considered that the carrying amount of these intangible assets may not be recoverable.

9. LONG-TERM DEPOSITS

Long-term deposits as of June 30, 2024 and December 31, 2023 consisted of:

	June 30, 2024	December 31, 2023
	(Unaudited)	
Rental deposits	\$ 71,823	\$ 71,823

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

10. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses as of June 30, 2024 and December 31, 2023 consisted of:

	June 30, 2024	December 31, 2023
	(Unaudited)	
Deferred bonus and salaries payable	\$ -	\$ 451,660
Research and development expenses payable	990,551	1,162,155
Professional fees payable	144,390	175,324
Cost of healthcare services payable	3,183	61,826
Insurance expenses payable	-	27,463
Others	10,111	15,913
	<u>\$ 1,148,235</u>	<u>\$ 1,894,341</u>

On March 31, 2023, the Group entered into exchange agreements and cancelled 177,667 existing vested and unvested share options held by related parties option holders and cancelled its obligations for deferred cash bonus payables of \$3.1 million by granting 403,820 share options with 6 months vesting period (see Note 17). The settlement of obligations of \$3.1 million deferred cash bonus payables was deemed as capital contribution from related parties and was credited to additional paid-in capital.

On March 31, 2023, the Group entered into exchange agreements and cancelled 70,428 existing vested and unvested share options held by non-related parties option holders and cancelled its obligations for deferred cash bonus payables of \$1.6 million by issuance of 70,430 fully vested Class A Ordinary Shares (see Note 15). The reversal of deferred cash bonus payables for \$1.0 million and \$0.6 million was credited to research and development expenses and general and administrative fees, respectively.

11. INCOME TAXES

The Company and its subsidiaries file tax returns separately.

Income taxes

Cayman Islands: under the current laws of the Cayman Islands, the Company and its subsidiaries in the Cayman Islands are not subject to taxes on their income and capital gains.

Hong Kong: in accordance with the relevant tax laws and regulations of Hong Kong, a company registered in Hong Kong is subject to income taxes within Hong Kong at the applicable tax rate on taxable income. All the Hong Kong subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 16.5%. The subsidiaries of the Group in Hong Kong did not have assessable profits that were derived Hong Kong during the six months ended June 30, 2024 and 2023. Therefore, no Hong Kong profit tax has been provided for in the periods presented.

United Kingdom: in accordance with the relevant tax laws and regulations of United Kingdom, a company registered in the United Kingdom is subject to income taxes within the United Kingdom at the applicable tax rate on taxable income. All the United Kingdom subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 19%. The subsidiary of the Group in the United Kingdom did not have assessable profits that were derived from the United Kingdom during the six months ended June 30, 2024 and 2023. Therefore, no United Kingdom profit tax has been provided for in the periods presented.

Singapore: in accordance with the relevant tax laws and regulations of Singapore, a company registered in the Singapore is subject to income taxes within Singapore at the applicable tax rate on taxable income. All the Singapore subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 17%. The subsidiary in Singapore did not have assessable profits that were derived from Singapore during the six months ended June 30, 2024 and 2023. Therefore, no Singapore profit tax has been provided for in the periods presented.

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

United States (Nevada): in accordance with the relevant tax laws and regulations of the United States, a company registered in the United States is subject to income taxes within the United States at the applicable tax rate on taxable income. All the United States subsidiaries in Nevada that are not entitled to any tax holiday were subject to income tax at a rate of 21%. The subsidiary in the United States did not have assessable profits that were derived from the United States during the six months ended June 30, 2024 and 2023. Therefore, no United States profit tax has been provided for in the periods presented.

On a semi-annually basis, the Group evaluates the realizability of deferred tax assets by jurisdiction and assesses the need for a valuation allowance. In assessing the realizability of deferred tax assets, the Group considers historical profitability, evaluation of scheduled reversals of deferred tax liabilities, projected future taxable income and tax-planning strategies. Valuation allowances have been provided on deferred tax assets where, based on all available evidence, it was considered more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. After consideration of all positive and negative evidence, the Group believes that as of June 30, 2024, it is more likely than not the deferred tax assets will not be realized.

12. RELATED PARTY BALANCES AND TRANSACTIONS

The following is a list of a director and related parties to which the Group has transactions with:

- (a) Ian Huen, the Chief Executive Officer and Executive Director of the Group since November 2023. He was a Non-executive Director from June 2022 to November 2023. Before June 2022, he was the Chief Executive Officer and Executive Director;
- (c) Charles Bathurst, an Independent Non-Executive Director of the Group;
- (d) CGY Investment Limited, an entity owns more than 10% voting interest of the Group before April 2024;
- (f) Aeneas Group Limited, an entity controlled by Ian Huen;
- (h) Aeneas Management Limited, an entity controlled by Ian Huen;
- (i) Talem Medical Group Limited, an entity controlled by Ian Huen;
- (j) Jurchen Investment Corporation, the holding company and an entity controlled by Ian Huen;
- (k) Libra Sciences Limited, an entity which was originally a wholly owned subsidiary of Aptorum Therapeutics Limited (“ATL”). Since December 30, 2021, Libra has been turned into a related party to the Group due to the voting power owned by ATL is decreased to below 50% but more than 20%; (Note 13) and

ACC Medical Limited, an entity controlled by Clark Cheng, a former Executive Director of the Group before November 30, 2023.

Amounts due from related parties

Amounts due from related parties consisted of the following as of June 30, 2024 and December 31, 2023:

	June 30, 2024	December 31, 2023
Current	(Unaudited)	
Aeneas Management Limited	\$ -	\$ 961
Charles Bathurst	3,595	-
Libra Sciences Limited (Note b)	521,007	521,007
Allowance for credit loss	(521,007)	(521,007)
Total	\$ 3,595	\$ 961

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

Amounts due to related parties

Amounts due to related parties consisted of the following as of June 30, 2024 and December 31, 2023:

	June 30, 2024	December 31, 2023
	(Unaudited)	
Current		
Aeneas Group Limited (Note a)	\$ 79,180	\$ 79,180
Non-current		
Jurchen Investment Corporation (Note 16)	\$ 3,148,500	\$ 3,058,500

Related party transactions

Related party transactions consisted of the following for the six months ended June 30, 2024 and 2023:

	For the six months ended June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
Loan from a related party (Note a)		
- Aeneas Group Limited	\$ -	\$ 2,500,000
Settlement of loan from a related party through issuance of Convertible Note (Note 16)		
- Aeneas Group Limited	\$ -	\$ 3,000,000
Interest expenses (Note a and Note 16)		
- Aeneas Group Limited	\$ -	\$ 71,123
- Jurchen Investment Corporation	\$ 90,000	-
Loan to a related party (Note b)		
- Libra Sciences Limited	\$ -	\$ 92,459
Repayment of loan and interest from a related party (Note b)		
- Talem Medical Group Limited	\$ -	\$ 595,900
Interest incomes (Note b)		
- Talem Medical Group Limited	\$ -	\$ 4,518
- Libra Sciences Limited	\$ -	\$ 8,963
Consultant, management and administrative fees (Note c)		
- CGY Investments Limited	\$ -	\$ 131,691
- ACC Medical Limited	\$ -	\$ 138,768
Administrative fees income (Note e)		
- Libra Sciences Limited	\$ -	\$ 9,615

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Note a: On August 13, 2019, Aptorum Therapeutics Limited (“ATL”), a wholly owned subsidiary of the Company, entered into financing arrangements with Aeneas Group Limited, a related party, and Jurchen Investment Corporation, the ultimate parent of the Group, allowing ATL to access up to a total \$15 million in line of credit debt financing. Both line of credits have originally matured on August 12, 2022. ATL and Aeneas Group Limited has mutually agreed to extend the line of credit arrangement further 3 years to August 12, 2025. The interest on the outstanding principal indebtedness is at the rate of 8% per annum. ATL may early repay, in whole or in part, the principal indebtedness and all interest accrued at any time prior to the maturity date without the prior written consent of the lender and without payment of any premium or penalty. As of the date of this unaudited condensed consolidated financial statements, the undrawn line of credit facility is \$12 million.

Note b: On November 17, 2021, Aptorum Therapeutics Limited (the “Lender”) entered into a loan agreement with Talem Medical Group Limited (the “Borrower”). According to the loan agreement, the Lender granted a loan of up to AUD4,700,000 for the Borrower for general working capital purposes of the Borrower and its subsidiaries. The loan is interest-bearing at a rate of 10% per annum and secured by the entire issued shares of Talem Medical Group (Australia) Pty Limited held by the Borrower. The loan is initially matured 6 months from the date of the first drawdown. The maturity date is extended for 6 months to the first extended maturity date, and may further extendable for another 6 months to the second extended maturity date, if certain conditions stated in loan agreement are satisfied. As of the date of this unaudited condensed consolidated financial statements, there is no outstanding balance from the Borrower following a repayment in February 2023.

On January 13, 2022, ATL entered a line of credit facility with Libra Sciences Limited to provide up to a total \$1 million line of credit for its daily operation. The line of credit is originally matured on January 12, 2023, and is extended for additional 3 years. The interest on the outstanding principal indebtedness is at the rate of 10% per annum. ATL and Libra Science Limited mutually agreed to terminate the line of credit agreement effect as of March 31, 2023. All existing liabilities arising from the line of credit agreement shall remain enforceable and repayable on demand by ATL. As of the issuance date of this unaudited condensed consolidated financial statements, \$0.5 million is outstanding from Libra Sciences Limited. For the six months ended June 30, 2024 and year ended December 31, 2023, the Group has assessed that the amounts due from Libra Science Limited and its subsidiary are potentially unrecoverable. Accordingly, an allowance for credit loss amounting to \$0.5 million has been recognized.

Note c: CGY Investment Limited provided certain consultancy, advisory and management services to the Group on potential investment projects related to healthcare or R&D platforms. CGY Investment Limited is initially entitled to receive HK \$104,000 (approximately \$13,333) per calendar month plus reimbursement; such monthly service fee is adjusted to HK\$171,200 (approximately US\$21,949) with effect from March 1, 2022. In August 2023, CGY Investment Limited has agreed to suspended its monthly services fee from August 1, 2023. In November 2023, CGY Investment Limited and the Group reached a mutual agreement to terminate their contractual relationship.

ACC Medical Limited provided certain consultancy, advisory, and management services to the Group on clinic operations and other related projects for clinics’ business development. ACC Medical Limited is initially entitled to receive HK \$101,542 (approximately \$13,018) per calendar month plus reimbursement; such monthly service fee is adjusted to HK\$143,200 (approximately US\$18,359 per month) effective from March 1, 2022. During the six month period ended June 30, 2023, ACC Medical Limited also received \$28,615 one-off compensation. The agreement was terminated on June 30, 2023.

Note d: On February 25, 2023, Aptorum Medical Limited further issued 122 shares to Clark Cheng in according to the appointment agreement, decreasing the equity interest held by the Company from 91% to 90%.

Note e: On January 1, 2022, Aptus Management Limited (“AML”), a wholly owned subsidiary of the Company, entered into an administrative management services agreement with Libra Sciences Limited. According to the agreement, AML will provide documentation and administrative services, include but are not limited to human resources and payroll administration, general secretarial and administrative support, and accounting and financial reporting services. AML is entitled to receive a fixed amount of services fees of HKD 25,000 (approximately \$3,205) per calendar month with the original expiry date on December 31, 2023. AML and Libra Sciences Limited mutually agreed to terminate the administrative management service agreement effect as of March 31, 2023.

Note f: In accordance with mutual agreements reached with the board of directors, Mr. Ian Huen agreed to forgo their monthly remuneration effective July 1, 2023 until further notice. Moreover, Mr. Darren Lui and Mr. Clark Cheng, former executive directors before their resignation in November 2023, consented to suspend their monthly remuneration from August 1, 2023 and July 1, 2023, respectively. Additionally, all independent non-executive directors have consented to suspend their monthly remuneration from September 1, 2023 until further notice. Before the suspension of remuneration, Mr. Ian Huen, Mr. Clark Cheng, and Mr. Darren Lui had a monthly remuneration of \$27,333, \$6,410 and \$6,667, respectively.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

13. VARIABLE INTEREST ENTITY

The Company consolidates VIEs in which the Group has a variable interest and is determined to be the primary beneficiary. This determination is based on whether the Group has a variable interest (or combination of variable interests) that provides the Company with (a) the power to direct the activities that most significantly impact the VIE’s economic performance and (b) the obligation to absorb losses or right to receive benefits that could be potentially significant to the VIE. The Group continually reassesses whether it is the primary beneficiary of a VIE throughout the entire period the Group is involved with the VIE.

On December 30, 2021, three of the Group’s subsidiaries, Libra Sciences Limited (“Libra”, formerly known as Aptorum Pharmaceutical Development Limited), Mios Pharmaceuticals Limited (“Mios”) and Scipio Life Sciences Limited (“Scipio”), issued Class A and Class B ordinary shares to various parties; for each such entity, each Class A ordinary share is entitled to 1 vote and 1 share of economic benefit of the respective company, while each Class B ordinary share is entitled to 10 votes and 0.001 share of economic benefit of the respective company. Following such share issuances, the Group lost its majority voting rights in each of these three companies and only holds 48.33%, 48.39% and 48.36% economic interest in Libra, Mios and Scipio, respectively. However, the Company still holds a majority of each of these three company’s outstanding Class A ordinary shares and therefore will absorb/receive portions of these subsidiaries’ expected losses or residual returns. In addition, none of these three companies have sufficient equity to sustain its own activities, and they have two classes of ordinary shares which have different rights, benefits and obligations. The Company determined that all these three companies are variable interest entities (“VIE”). On December 31, 2021, Libra, Mios and Scipio further issued Class A ordinary shares to a wholly owned subsidiary of the Company in exchange of certain projects licenses. Upon these share issuances, the Company, through a wholly owned subsidiary, was holding 97.27% economic interest and 31.51% voting power in Libra, 97.93% economic interest and 36.17% voting power in Mios, and 97.93% economic interest and 35.06% voting power in Scipio, respectively.

The Company has considered each of these entity’s Memorandum and Article of Association and their respective board of directors (the sole director of each of Mios and Scipio is an executive director of the Group), and determined that The Company has the power to manage and make decisions that affect Mios and Scipio’s research and development activities, which activities most significantly impact Mios and Scipio’s economic performance. However, the Company does not have such power over Libra’s research and development activities, which activities most significantly impact Libra’s economic performance. Accordingly, the Company determined that it is the primary beneficiary of Mios and Scipio, but not the primary beneficiary of Libra.

The following tables summarize the aggregate carrying value of VIEs’ assets and liabilities in the consolidated balance sheets that are consolidated

	Assets	Liabilities	Net Assets
June 30, 2024 (Unaudited)			
Total	\$ 22,501	\$ 3,558	\$ 18,943
	Assets	Liabilities	Net Assets
December 31, 2023			
Total	\$ 24,352	\$ 3,558	\$ 20,794

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

The following tables summarize the aggregate carrying value of assets and liabilities in the Group’s consolidated balance sheets that relate to the VIE in which the Group holds a variable interest but is not the primary beneficiary.

	Assets	Liabilities	Net Assets	Maximum Exposure to Losses
June 30, 2024 (Unaudited)				
Total	\$ -	\$ -	\$ -	\$ -

	Assets	Liabilities	Net Assets	Maximum Exposure to Losses
December 31, 2023				
Total	\$ -	\$ -	\$ -	\$ -

The Group’s maximum exposure to loss from its involvement with unconsolidated VIE represents the estimated loss that would be incurred if the VIE is liquidated, so that the fair value of the equity investment in VIE is zero and the amounts due from the VIE have to be fully impaired.

14. LEASE

As of June 30, 2024, the Group has a non-short-term operating lease for laboratory with remaining term expiring in 2026 and a remaining lease term of 1.7 years. Weighted average discount rates used in the calculation of the operating lease liability is 8%. The discount rates reflect the estimated incremental borrowing rate, which includes an assessment of the credit rating to determine the rate that the Group would have to pay to borrow, on a collateralized basis for a similar term, an amount equal to the lease payments in a similar economic environment.

	For the six months ended June 30,	
	2024 (Unaudited)	2023 (Unaudited)
Lease cost		
Finance lease cost:		
Depreciation	\$ -	\$ -
Interest on lease liabilities	-	-
Operating lease cost	45,167	190,040
Short-term lease cost	2,062	38,900
Variable lease cost	-	-
Sublease income	-	-
Total lease cost	\$ 47,229	\$ 228,940
Other information		
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	\$ 80,015	\$ 182,060
Financing cash flows from finance leases	-	-
Right-of-use assets obtained in exchange for new operating lease liabilities	-	338,525
Weighted-average remaining lease term – finance leases	-	-
Weighted-average remaining lease term – operating leases	1.7 years	2.0 years
Weighted-average discount rate – finance leases	-%	-%
Weighted-average discount rate – operating leases	8.0%	8.0%

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

During the six months ended June 30, 2024 and 2023, an impairment loss of \$144,051 and \$200,916, respectively, on right-of-use assets was recognized in other operating expenses as the Group considered that the carrying amount of a right-of-use asset related to leases of laboratory and clinic may not be recoverable.

The maturity analysis of operating leases liabilities as of June 30, 2024 is as follows:

	June 30, 2024 (Unaudited)
Remaining periods ending December 31,	
2024	\$ 32,647
2025	97,541
2026	24,573
Total future undiscounted cash flow	154,761
Less: Discount on operating lease liabilities	(2,898)
Present value of operating lease liabilities	151,863
Less: Current portion of operating lease liabilities	(89,145)
Non-current portion of operating lease liabilities	\$ 62,718

15. ORDINARY SHARES

On March 26, 2021, the Company entered into an at-the-market offering agreement (the “Sales Agreement”), with H.C. Wainwright & Co., LLC, acting as its sales agent (the “Sales Agent”), relating to the sale of its Class A Ordinary Shares, offered pursuant to the prospectus supplement and the accompanying prospectus to the registration statement on Form F-3 (File No. 333-235819) (such offering, the “ATM Offering”, or “At The Market Offering”). In accordance with the terms of the Sales Agreement, the Company may offer and sell shares of its Class A Ordinary Shares having an aggregate offering price of up to \$15,000,000 from time to time through the Sales Agent under such prospectus supplement and the accompanying prospectus. For the six months ended June 30, 2023, the Company has issued 215,959 Class A Ordinary Shares at average issuance price of \$7.53 per share pursuant to the ATM Offering with gross proceeds of \$1.6 million, less transaction costs of \$50,183.

On January 23, 2023, the Company effectuate a 10 for 1 share consolidation of its authorized share capital, such that every 10 Class A Ordinary Shares, par value of US\$1.00 per share, in the authorized share capital of the Company (including issued and unissued share capital) be consolidated into 1 Class A Ordinary Share, par value of US\$10.00 per share, and that every 10 Class B Ordinary Shares, par value of US\$1.00 per share in the authorized share capital of the Company (including issued and unissued share capital) be consolidated into 1 Class B Ordinary Share, par value of US\$10.00 per share. As a consequence of the reverse stock split, fractional shares were rounded up to the next whole share, resulting in the creation of an additional 8,018 Class A Ordinary Shares.

On February 21, 2023, the Company was merged with Aptorum Group Cayman Limited, a newly established wholly owned subsidiary of the Company, whereby the Company is the surviving company on the terms of the plan of merger. According to the plan of merger, the par value of its Class A and Class B Ordinary Shares are changed from USD10 to USD0.00001.

On March 31, 2023, the Group issued 70,430 Class A Ordinary Shares to a majority of the share option holders. This issuance served as an exchange for their share options and facilitated the reversal of deferred cash bonus payables owed to these holders (See Note 10).

On March 31, 2023, the Group also issued 65,770 fully vested shares with \$2.68 per share market price to certain employees and external consultants.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

For the six months ended June 30, 2024 and 2023, the Group issued 289,401 and 791, respectively, Class A Ordinary Shares to share option holders due to exercise of share options.

For the six months ended June 30, 2024, the Group issued 446,842 Class A Ordinary Shares to Class B Ordinary Shares holders upon conversion.

For the six months ended June 30, 2023, the Group issued 1,250,000 Class A Ordinary Shares to convertible note holders upon conversion.

Holders of Class A Ordinary Shares and Class B Ordinary Shares have the same rights except for the following: (i) each Class A Ordinary Share is entitled to one vote while each Class B Ordinary Share is entitled to ten votes; and (ii) each Class B Ordinary Share is convertible into one Class A Ordinary Share at any time while Class A Ordinary Shares are not convertible under any circumstances.

16. CONVERTIBLE NOTE

On June 28, 2023, the Group entered into a securities purchase agreement with 4 investors. Pursuant to the securities purchase agreement, the investors are purchasing a convertible note in the original principal amount of \$3,000,000 (the “June 2023 Note”). The whole proceeds from the June 2023 Note was used to settle a related party loan. The June 2023 Note is unsecured, convertible into the Company’s restricted Class A Ordinary Shares at the Note holders’ option. The June 2023 Notes have a maturity date of 12 months subject to the investors extension, a bullet interest rate of 7% per annum, and a conversion price of \$3.00 per Class A Ordinary share. The Company shall have an obligation to repay the principal amount and interest of the June 2023 Note on the maturity date in cash or in unregistered Class A Ordinary Shares or a combination of such at the Company’s discretion. Immediately following the issuance of June 2023 Note, the June 2023 Note was fully converted into 1,000,000 Class A Ordinary Shares.

On September 11, 2023, the Group entered into a securities purchase agreement with Jurchen Investment Corporation, the largest shareholder of the Company, pursuant to which the Group sold a secured convertible note in the aggregate principal amount of \$3,000,000 (the “Sep 2023 Notes”). The Sep 2023 Notes are convertible into the Company’s Class A Ordinary Shares and have a maturity date that is 24 months from the issuance date, although upon such date the investor has the right to extend the term of the Sep 2023 Note for twelve (12) months or more or such term subject to mutual consent. The Sep 2023 Notes have an interest rate of 6% per annum and a conversion price of \$2.42 per share. The Company has the right to repay the principal amount of the Sep 2023 Notes, but in the case of such prepayment it must be paid in cash, unless otherwise agreed by both parties. The Sep 2023 Note is secured by a first priority lien and security interest on certain preferred shares that the Group owns (“Collateral”) (Note 5). Upon the Group’s disposal of all or a portion of the Collateral, the investor has the right, to request that the Group prepay the then-remaining outstanding balance of the Sep 2023 Note, in part or in full and the Group can make that payment in cash or in shares.

17. SHARE BASED COMPENSATION

Share option plan

On March 31, 2023, the Group entered into exchange agreements and cancelled 177,667 existing vested and unvested share options held by related parties option holders and cancelled the Group’s obligations for deferred cash bonus payables of \$3.1 million by granting of 403,820 share options (“New Options”) with 6 months vesting period. The New Options’ exercise price was \$2.68 per share, which was based on the last closing price of the shares traded on the NASDAQ stock exchange on the grant date. All options fully vested on October 1, 2023 and expires on September 30, 2033. On March 31, 2023, the Group entered into supplemental agreements with the same related parties option holders to provide additional cash compensation to cover the exercise price of the New Options. On March 31, 2023, the Group entered into exchange agreements and cancelled 70,428 existing vested and unvested share options held by non-related parties option holders and cancelled the Group’s obligations for deferred cash bonus payables of \$1.6 million by issuance of 70,430 fully vested Class A Ordinary Shares. The Group accounted for this exchange for both related parties and non-related parties share option holders as a modification to share based compensation which required the remeasurement of existing share options value at the time of the modification. The total incremental cost as a result of the modification was \$0.7 million.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

A summary of the option activity as of June 30, 2024 and 2023 and changes during the period is presented below:

	Number of share options	Weighted average exercise price \$	Remaining contractual term in years	Aggregate Intrinsic value \$
Outstanding, January 1, 2024	427,060	3.59	9.28	-
Exercised	(289,401)	4.03		1,384,653
Outstanding, June 30, 2024	137,659	2.68	9.26	234,296
Exercisable, June 30, 2024	137,659	2.68	9.26	234,296
Outstanding, January 1, 2023	272,126	21.54	10.83	-
Granted	403,820	2.68		
Exercised	(791)	20.90		-
Modified	(248,095)	21.74		
Outstanding, June 30, 2023	427,060	3.59	10.28	8,076
Exercisable, June 30, 2023	16,337	21.98	10.14	-

The weighted-average grant date fair value of share option grants during the six months ended June 30, 2023 was \$2.68. The maximum contractual term for share option was 10.5 years.

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model under the following assumptions.

	Granted in 2023
Expected volatility	170.10%
Risk-free interest rate	3.48%
Expected term from grant date (in years)	5.25
Dividend rate	-
Dilution factor	1
Fair value	\$ 2.68

In connection with the grant of share options to employees and non-employees, the Group recorded share-based compensation charges of \$470,070 and \$241,848 for the six months ended June 30, 2023 respectively. For the six-month period ended June 30, 2024, there were no charges related to share-based compensation.

APTORUM GROUP LIMITED

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Stated in U.S. Dollars)

18. NET LOSS PER SHARE

The following table sets forth the computation of basic and diluted loss per share:

	For the six months ended June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
Numerator:		
Net loss attributable to Aptorum Group Limited	\$ (2,643,796)	\$ (5,487,104)
Denominator:		
Basic and diluted weighted average shares outstanding	5,339,608	3,849,621
Basic and diluted loss per share	\$ (0.50)	\$ (1.43)

Basic loss per share is computed by dividing net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. Diluted loss per share reflects the potential dilution that could occur if securities or other contracts to issue ordinary shares were exercised or converted into ordinary shares. Potential dilutive securities are excluded from the calculation of diluted loss per share in loss periods as their effect would be anti-dilutive. For the six months ended June 30, 2024 and 2023, the total number of share options, warrants and convertible notes excluded from the calculation of diluted earnings per share due to their anti-dilutive nature, are 1,431,382 and 775,338, respectively.

19. COMMITMENTS AND CONTINGENCIES

Contingent payment obligation

As of June 30, 2024, the Group does not have any non-cancellable purchase commitments.

The Group has contingency payment obligations under each of the license agreements, such as milestone payments, royalties, research and development funding, if certain condition or milestone is met.

APTORUM GROUP LIMITED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Milestone payments are to be made upon achievements of certain conditions, such as Investigational New Drugs (“IND”) filing or U.S. Food and Drug Administration (“FDA”) approval, first commercial sale of the licensed products, or other achievements. The aggregate amount of the milestone payments that the Group is required to pay up to different achievements of conditions and milestones for all the license agreements signed as of June 30, 2024 are as below:

	Amount (unaudited)
Drug molecules: up to the conditions and milestones of	
Preclinical to IND filing	\$ 81,282
From entering phase 1 to before first commercial sale	9,748,205
First commercial sale	6,728,205
Net sales amount more than certain threshold in a year	29,384,616
Subtotal	45,942,308
Diagnostics technology: up to the conditions and milestones of	
Before FDA approval	147,493
Total	\$ 46,089,801

For the six months ended June 30, 2024 and 2023, the Group incurred \$60,659 and \$50,000 milestone payments respectively. For the six months ended June 30, 2024 and 2023, the Group did not incur any royalties or research and development funding.

Legal proceedings

From time to time, the Group may be subject to certain legal proceedings, claims and disputes that arise in the ordinary course of business. Although the outcomes of these legal proceedings cannot be predicted, the Group does not believe these actions, in the aggregate, will have a material adverse impact on its financial position, results of income or liquidity.

20. SUBSEQUENT EVENTS

The Group has evaluated subsequent events through the date of issuance of the unaudited condensed consolidated financial statements. Except for the events disclosed elsewhere in the unaudited condensed financial statements and the following events with material financial impact on the Group’s unaudited condensed consolidated financial statement, no other subsequent event is identified that would have required adjustment or disclosure in the unaudited condensed consolidated financial statements.

On October 25, 2024, the Group and YOOV Group Holding Limited, a company organized under the laws of the British Virgin Islands (“YOOV”), mutually agreed to terminate the Agreement and Plan of Merger dated March 1, 2024 (the “Merger Agreement”). The Merger Agreement originally aimed to facilitate the reverse takeover of YOOV resulting in YOOV becoming the major shareholder of the Group upon completion. However, both parties concluded that the conditions required to finalize the merger were no longer feasible.

**OPERATING AND FINANCIAL REVIEW AND PROSPECTS
IN CONNECTION WITH THE UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED JUNE 30, 2024 AND 2023**

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our unaudited consolidated financial statements and the related notes included elsewhere in this Report on Form 6-K and with the discussion and analysis of our financial condition and results of operations contained in our Annual Report on Form 20-F for the fiscal year ended December 31, 2023 filed with the Securities and Exchange Commission on April 30, 2024 (the “2024 Form 20-F”). This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed in the 2024 Form 20-F under the section titled “Risk Factors” and in other parts of the 2024 Form 20-F. Our consolidated financial statements have been prepared in accordance with U.S. GAAP.

Overview

We are a clinical stage biopharmaceutical company dedicated to the discovery, development and commercialization of therapeutic assets to treat diseases with unmet medical needs, particularly in oncology (including orphan oncology indications) and infectious diseases. The pipeline of Aptorum is also enriched through the co-development of Paths^{Dx} Test, a novel molecular-based rapid pathogen identification and detection diagnostics technology with Accelerate Technologies Pte Ltd, commercialization arm of the Singapore’s Agency for Science, Technology and Research.

Based on our evaluation of preliminary data and our consideration of a number of factors including substantial unmet needs, benefits over existing therapies, potential market size, competition in market, the Company decides how to prioritize its resources among projects. Overall, our rationale for selecting Lead Projects is not based on any mechanical formula or rigid selection criteria, but instead focused on a combination of the factors and individual attributes of the Lead Projects themselves.

Our current business consists of “therapeutics” and “non-therapeutics” segments. However, our focus is on the therapeutics segments.

Our goal is to develop a broad range of novel and repurposed therapeutics and diagnostics technology across a wide range of disease/therapeutic areas. Key components of our strategy for achieving this goal include:

- Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas;
- Selectively expanding our portfolio with potential products that may be able to attain orphan drug designation and/or satisfy current unmet medical needs;
- Collaborating with leading academic institutions and CROs;
- Expanding our in-house pharmaceutical development center;
- Leveraging our management’s expertise, experience and commercial networks;
- Obtaining and leveraging government grants to fund project development.

We have devoted a substantial portion of the proceeds from our offerings to our Lead Projects. Our Lead Projects are ALS-4, SACT-1 and Paths^{Dx}.

During the second quarter of 2023, the Company made a decision to streamline its operations by terminating clinic services and suspending non-lead R&D projects. This measure is aimed at optimizing the allocation of its resources and focusing its efforts on advancing lead projects, which hold the most promise for commercial success and beneficial impact. This decision aligns with the Company’s commitment to enhance shareholder value and effectively drive its core objectives forward in the competitive landscape.

On March 1, 2024, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) by and among Company, and YOOV Group Holding Limited, a BVI business company organized under the laws of British Virgin Islands (“YOOV”) to effect a merger among the parties (the “Merger”); the Company decided to pause the majority of its R&D activities to focus on the merger to ensure optimal allocation of resources and maximize shareholder value. On October 25, 2024, the Company and Yoov mutually agreed to terminate the Merger Agreement, and therefore the potential merger was abandoned. The Company will continue to explore other reverse takeover or business combination opportunities that are expected to be accretive to shareholder value.

On December 16, 2024, the Company received a letter from Carey Olsen with a Summons with Notice dated September 3, 2024, taken out by Karen Cheung (a/k/a Wing TSZ Cheung) as plaintiff against, among others, the Company as defendant in the Supreme Court of the State of New York County of New York, in relation to an action to recover financial losses sustained by the plaintiff (the “Case”). The Case is at the very early stages of litigation and although we intend to defend the lawsuit, there can be no assurance regarding the ultimate outcome of this case. Due to the inherent uncertain nature of litigation, the ultimate outcome or actual cost of settlement may materially vary from estimates. If management’s estimates prove incorrect, current reserves could be inadequate and we could incur a charge to earnings which could have a material adverse effect on our results of operations, financial condition, net worth, and cash flows.

Factors Affecting our Results of Operations

Research and Development Expenses

We believe our ability to successfully develop innovative drug candidates will be the primary factor affecting our long-term competitiveness, as well as our future growth and development. Creating high quality global first-in-class or best-in-class drug candidates requires significant investment of resources over a prolonged period of time. As a result of this commitment, our pipeline of drug candidates has been steadily advancing.

Our drug candidates are still in development, and we have incurred and will continue to incur significant research and development costs for pre-clinical studies and clinical trials. We expect that our research and development expenses may significantly increase in future periods in line with the advancement and expansion of the development of our drug candidates.

We have been able to fund the research and development expenses for our drug candidates through a range of sources, including the proceeds raised from our public offering and follow-on offerings on Nasdaq, private placement to other investors and line of credit facilities from shareholders, related parties and banks.

This diversified approach to funding allows us to not depend on any one method of funding for our research and development activities, thereby reducing the risk that sufficient financing will be unavailable as we continue to accelerate the development of our drug candidates.

RESULTS OF OPERATION

For the six months ended June 30, 2024 and 2023

The following table summarizes our results of operations for the six months ended June 30, 2024 and 2023.

	For the six months ended	
	June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
Revenue		
Healthcare services income	\$ -	\$ 431,378
Operating expenses		
Cost of healthcare services	-	(426,063)
Research and development expenses	(2,038,923)	(3,212,366)
General and administrative fees	(326,187)	(1,263,019)
Legal and professional fees	(366,164)	(1,738,566)
Other operating expenses	(137,233)	(330,212)
Total operating expenses, net	(2,868,507)	(6,970,226)
Other income (expenses)		
Loss on investments in marketable securities, net	-	(9,266)
Interest (expense) income, net	(68,462)	(93,478)
Loss on disposal of subsidiaries	(4,271)	-
Sundry income	282,353	36,803
Total other income (expenses), net	209,620	(65,941)
Net loss	(2,658,887)	(6,604,789)

Revenue

Healthcare services income was \$nil and \$431,378 for the six months ended June 30, 2024 and 2023, respectively, which related to the services income derived from the AML clinic. The decline in healthcare services income was attributed to the strategic decision to suspend clinic services in the second quarter of 2023. This was done to reallocate resources towards the development of the Company’s leading projects.

Cost of healthcare services

Cost of healthcare services was \$nil and \$426,063 for the six months ended June 30, 2024 and 2023, respectively, which related to the cost incurred by clinic. The decline in cost of healthcare services was attributed to the strategic decision to suspend clinic services in the second quarter of 2023.

Research and development expenses

Research and development expenses comprised of costs incurred related to research and development activities, including payroll expenses to our research and development staff, service fees to our consultants, advisory and contracted research organization, depreciation of laboratory equipment and amortization of licensed patents, sponsored research programs with various universities and research institutions and costs in acquiring IP rights which did not meet the criteria of capitalization under the U.S. GAAP. The following table sets forth a summary of our research and development expenses for the six months ended June 30, 2024 and 2023. Before the Merger Agreement was terminated, we determined it was best to focus all of our attention and resources on completing the Merger and therefore paused the majority of our R&D activities during that time; following the termination of the Merger Agreement in the fourth quarter of fiscal 2024, we determined that searching for other business combination opportunities could maximize shareholder value, and our R&D activities remain suspended.

	For the six months ended	
	June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
Research and Development Expenses:		
Amortization and depreciation	\$ 251,567	\$ 620,741
Consultation	92,308	741,308
Milestones payment	60,659	50,000
Sponsored research	34,948	14,733
Contracted research organizations	19,210	626,026
Other R&D expenses	30,321	279,893
Payroll expenses	-	360,169
Impairment loss on long-lived assets	1,549,910	519,496
Total Research and Development Expenses	2,038,923	3,212,366

	For the six months ended	
	June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
R&D expenses by projects		
ALS-4	\$ 1,654,061	\$ 889,884
SACT-1	92,308	239,642
Paths ^{Dx}	102,638	1,125,029
Other projects	189,916	957,811
Total	\$ 2,038,923	\$ 3,212,366

General and administrative fees

The following table sets forth a summary of our general and administrative fees for the six months ended June 30, 2024 and 2023. The decrease in general and administrative expenses was primarily attributable to the streamlining of our operations to focus on preparation for the Merger, which has since been abandoned.

	For the six months ended	
	June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
General and Administrative Fees:		
Insurance	\$ 182,527	\$ 245,199
Rent and rates	74,296	156,299
Payroll expenses	59,308	592,030
Amortization and depreciation	3,480	49,907
Travelling expenses	205	38,025
Advertising and marketing expenses	-	42,156
Other expenses	6,371	139,403
Total General and Administrative Fees	326,187	1,263,019

Legal and professional fees

For the six months ended June 30, 2024 and 2023, the legal and professional fees were \$366,164 and \$1,738,566, respectively. The decrease in legal and professional fees was primarily attributed to the lack of non-routine activities that were present in the same period last year, such as the implementation of reverse stock split, and amendments to the memorandum and articles of association. The absence of such non-routine exercises in the current period has resulted in a decrease in legal and professional fees.

Other operating expenses

For the six months ended June 30, 2024 and 2023, the other operating expenses were \$137,233 and \$330,212, respectively. The decrease was primarily due to the decrease in impairment loss of long-lived assets as majority of long-lived assets were impaired in prior period.

Other income (expenses)

The following table sets forth a summary of other income (expenses) for the six months ended June 30, 2024 and 2023.

	For the six months ended	
	June 30,	
	2024	2023
	(Unaudited)	(Unaudited)
Other income (expenses):		
Loss on investments in marketable securities, net	\$ -	\$ (9,266)
Interest expense, net	(68,462)	(93,478)
Loss on disposal of subsidiaries	(4,271)	-
Sundry income	282,353	36,803
Total other income (expenses), net	209,620	(65,941)

Net loss attributable to Aptorum Group Limited

For the six months ended June 30, 2024 and 2023, net loss attributable to Aptorum Group Limited (excluding net loss attributable to non-controlling interests) was \$2,643,796 and \$5,487,104, respectively.

LIQUIDITY AND CAPITAL RESOURCES

The Group reported a net loss of \$2,658,887 and net operating cash outflow of \$1,280,887 for the six months ended June 30, 2024. In addition, the Group had an accumulated deficit of \$70,805,518 as of June 30, 2024. The Group’s operating results for future periods are subject to numerous uncertainties and it is uncertain if the Group will be able to reduce or eliminate its net losses for the foreseeable future. If management is not able to generate significant revenues from its product candidates currently in development, the Group may not be able to achieve profitability.

In additions, the Group terminated the Agreement and Plan of Merger dated March 1, 2024 (the “Merger Agreement”) which originally aimed to facilitate the reverse takeover of YOOV resulting in YOOV becoming the major shareholder of the Group upon completion. This termination, together with recurring net losses and net operating cash outflow, may raise substantial doubt about the Group’s ability to continue as a going concern.

The Group’s liquidity is based on its ability to enhance its operating cash flow position, obtain capital financing from equity interest investors and borrow funds to fund its general operations and capital expenditure. The Group will need to maintain its operating costs at a level through strict cost control and budget, such as staff reduction, to ensure operating costs are minimized and will not exceed such aforementioned sources of funds to continue as a going concern for a period within 12 months after the issuance of its unaudited condensed consolidated financial statements. The Group’s ability to continue as a going concern is dependent on management’s ability to execute its business plan successfully.

If the Group determines that its cash requirements exceed the amount of cash and cash equivalents the Group has at the time, the Group may seek to issue equity or debt securities or obtain credit facilities. The issuance and sale of additional equity or convertible debts would result in further dilution to its shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating covenants that might restrict its operations. The Group cannot assure that the financing will be available in amounts or on terms acceptable to the Group, if at all. However, the management plans cannot alleviate the substantial doubt of the Group’s ability to continue as a going concern. There can be no assurance that the Group will be successful in achieving its strategic plans, that the Group’s future capital raises will be sufficient to support its ongoing operations, or that any additional financing will be available in a timely manner or with acceptable terms, if at all. If the Group is unable to raise sufficient financing or events or circumstances occur such that the Group does not meet its strategic plans, the Group will be required to reduce certain discretionary spending, alter or scale development programs, or be unable to fund capital expenditures, which would have a material adverse effect on the Group’s financial position, results of operations, cash flows, and ability to achieve its intended business objectives.

The accompanying unaudited condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Accordingly, the unaudited condensed consolidated financial statements have been prepared on a basis that assumes the Group will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

CONTRACTUAL OBLIGATIONS

The following table sets forth our contractual obligations as of June 30, 2024.

	Payment Due by Period (Unaudited)			
	Total	less than one year	One to three years	Three to five years
	US\$	US\$	US\$	US\$
Operating lease commitments	171,084	92,100	78,984	-
Debt obligations	3,360,000	-	3,360,000	-
Finance lease	-	-	-	-
Total	3,531,084	92,100	3,438,984	-

Operating lease commitments

We have an operating lease for laboratory. Operating lease commitments reflect our obligation to make payments under the operating lease.

Debt obligations

Debt obligations reflects outstanding principal and accrued interest payable to Jurchen Investment Corporation, the largest shareholder of the Company, pursuant to a convertible note arrangement. This instrument features a conversion option at a price of \$2.42 per share into the Company’s Class A Ordinary Shares. It carries a two-year maturity from the date of issuance and bears an annual interest rate of 6%.

The Group can access up to a total \$12 million under a line of credit offered by Aeneas Group Limited. The line of credit was originally mature on August 12, 2022. The Group and Aeneas Group Limited has mutually agreed to extend the line of credit arrangement further 3 years to August 12, 2025. The interest on the outstanding principal indebtedness is at the rate of 8% per annum. The Group may early repay, in whole or in part, the principal indebtedness and all interest accrued at any time prior to the maturity date without the prior written consent of the lender and without payment of any premium or penalty.

CONTINGENT PAYMENT OBLIGATIONS

As of June 30, 2024, we do not have any non-cancellable purchase commitments.

The Group has contingency payment obligations under each of the license agreements, such as milestone payments, royalties, research and development funding, if certain condition or milestone is met.

Milestone payments are to be made upon achievements of certain conditions, such as Investigational New Drugs (“IND”) filing or U.S. Food and Drug Administration (“FDA”) approval, first commercial sale of the licensed products, or other achievements. The aggregate amount of the milestone payments that we are required to pay up to different achievements of conditions and milestones for all the license agreements signed as of June 30, 2024 are as below:

	Amount (unaudited)
Drug molecules: up to the conditions and milestones of	
Preclinical to IND filing	\$ 81,282
From entering phase 1 to before first commercial sale	9,748,205
First commercial sale	6,728,205
Net sales amount more than certain threshold in a year	29,384,616
Subtotal	45,942,308
Diagnostics technology: up to the conditions and milestones of	
Before FDA approval	147,493
Total	\$ 46,089,801

For the six months ended June 30, 2024 and 2023, the Group incurred \$60,659 and \$50,000 milestone payments respectively. For the six months ended June 30, 2024 and 2023, the Group did not incur any royalties or research and development funding.

CONDENSED SUMMARY OF OUR CASH FLOWS

	Six months ended June 30, 2024 (Unaudited)	Six months ended June 30, 2023 (Unaudited)
Net cash used in operating activities	\$ (1,280,887)	\$ (6,193,088)
Net cash provided by investing activities	58,621	558,781
Net cash provided by financing activities	-	1,092,068
Net decrease in cash and restricted cash	(1,222,266)	(4,542,239)

For the six months ended June 30, 2024 and 2023

Operating activities

Net cash used in operating activities amounted to \$1.3 million and \$6.2 million for the six months ended June 30, 2024 and 2023, respectively. The net cash used in operating activities declined due to the implementation of stringent budgetary control measures, as a result of the Company's exclusive emphasis on the previously anticipated Merger.

Investing activities

Net cash provided by investing activities amounted to \$0.1 million and \$0.6 million for the six months ended June 30, 2024 and 2023, respectively. The decrease in net cash provided by investing activities was due to the decrease in cash received from related parties for loan repayment by \$0.5 million.

Financing activities

Net cash provided by financing activities amounted to \$nil and \$1.1 million for the six months ended June 30, 2024 and 2023, respectively. The decrease in net cash inflow from financing activities is attributed to the absence of financing activities during the period, as the Company was solely focused on the previously anticipated Merger.

Statement Regarding Unaudited Financial Information

The unaudited financial information set forth above is subject to adjustments that may be identified when audit work is performed on the Company's year-end financial statements, which could result in significant differences from this unaudited financial information.



Aptorum Group Limited Reports Financial Results and Business Update for the Six Months Ended June 30, 2024

Aptorum Group Limited (NASDAQ: APM) (“Aptorum Group” or the “Company”), a clinical stage biopharmaceutical company dedicated to meeting unmet medical needs in oncology, autoimmune and infectious diseases, today provided a business update and announced financial results for the six months ended June 30, 2024.

“Our team and Yoov have spent considerable time and effort on the due diligence process, the negotiation of definitive terms, and the preparation of necessary transactional and listing documentation. However, current market conditions have introduced significant uncertainty regarding the availability of the required funding for the transaction. After careful consideration, our Board has determined that it is no longer in the best interests of our shareholders to proceed with this transaction. Despite this, we will continue to explore other business combination opportunities that we believe will enhance shareholder value,” stated Mr. Ian Huen, Chief Executive Officer and Executive Director of Aptorum Group Limited.

Corporate Highlights

On October 24, 2024, the Company and Yoov Group Holding Limited (“Yoov”) entered into a termination agreement and the anticipated reverse takeover transaction with Yoov was terminated.

Financial Results for the Six Months Ended June 30, 2024

Aptorum Group reported a net loss of \$2.7 million for the six months ended June 30, 2024 compared to \$6.6 million for the same period in 2023. The decrease in net loss in the current period was driven by the decrease in operating expenses by \$4.1 million due to the implementation of stringent budgetary control measures, as a result of the Company’s exclusive emphasis on the previous anticipated RTO.

Research and development expenses were \$2.0 million for the six months ended June 30, 2024 compared to \$3.2 million for the same period in 2023. Before the Merger Agreement was terminated, we determined it was best to focus all of our attention and resources on completing the Merger and therefore paused the majority of our R&D activities during that time; following the termination of the Merger Agreement in the fourth quarter of fiscal 2024, we determined that searching for other business combination opportunities could maximize shareholder value, and our R&D activities remain suspended.

General and administrative fees were \$0.3 million for the six months ended June 30, 2024 compared to \$1.3 million for the same period in 2023. The decrease in general and administrative fees was primary due to the streamlining of our operations to focus on preparation for the Merger, which has since been abandoned.

Legal and professional fees were \$0.4 million for the six months ended June 30, 2024 compared to \$1.7 million for the same period in 2023. The decrease in legal and professional fees was attributed to the lack of non-routine activities that were present in the same period last year, such as the implementation of reverse stock split, and amendments to the memorandum and articles of association. The absence of such non-routine exercises in the current period has resulted in a decrease in legal and professional fees.

As of June 30, 2024, cash and restricted cash totaled approximately \$0.8 million and total equity was approximately \$13.2 million.

APTORUM GROUP LIMITED

UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS

June 30, 2024 and December 31, 2023

(Stated in U.S. Dollars)

	June 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash	\$ 783,085	\$ 2,005,351
Accounts receivable	21,800	47,709
Amounts due from related parties	3,595	961
Other receivables and prepayments	725,616	422,071
Total current assets	1,534,096	2,476,092
Property and equipment, net	-	1,663,926
Operating lease right-of-use assets	-	182,057
Long-term investments	16,098,846	16,098,846
Intangible assets, net	-	147,347
Long-term deposits	71,823	71,823
Total Assets	\$ 17,704,765	\$ 20,640,091
LIABILITIES AND EQUITY		
LIABILITIES		
Current liabilities:		
Amounts due to related parties	\$ 79,180	\$ 79,180
Accounts payable and accrued expenses	1,148,235	1,894,341
Operating lease liabilities, current	89,145	125,232
Total current liabilities	1,316,560	2,098,753
Operating lease liabilities, non-current	62,718	99,485
Convertible notes to a related party	3,148,500	3,058,500
Total Liabilities	\$ 4,527,778	\$ 5,256,738
Commitments and contingencies	-	-
EQUITY		
Class A Ordinary Shares (\$0.00001 par value, 9,999,996,000,000 shares authorized, 3,674,164 shares issued and outstanding as of June 30, 2024; 2,937,921 shares issued and outstanding as of December 31, 2023)	\$ 37	\$ 31
Class B Ordinary Shares (\$0.00001 par value; 4,000,000 shares authorized, 1,796,934 shares issued and outstanding as of June 30, 2024; 2,243,776 shares issued and outstanding as of December 31, 2023)	18	22
Additional paid-in capital	93,470,186	93,018,528
Accumulated other comprehensive loss	(9,762)	(10,623)
Accumulated deficit	(70,805,518)	(68,161,722)
Total equity attributable to the shareholders of Aptorum Group Limited	22,654,961	24,846,236
Non-controlling interests	(9,477,974)	(9,462,883)
Total equity	13,176,987	15,383,353
Total Liabilities and Equity	\$ 17,704,765	\$ 20,640,091

APTORUM GROUP LIMITED
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
For the six months ended June 30, 2024 and 2023
(Stated in U.S. Dollars)

	For the six months ended June 30,	
	2024	2023
Revenue		
Healthcare services income	\$ -	\$ 431,378
Operating expenses		
Costs of healthcare services	-	(426,063)
Research and development expenses	(2,038,923)	(3,212,366)
General and administrative fees	(326,187)	(1,263,019)
Legal and professional fees	(366,164)	(1,738,566)
Other operating expenses	(137,233)	(330,212)
Total operating expenses	<u>(2,868,507)</u>	<u>(6,970,226)</u>
Other income (expenses)		
Loss on investments in marketable securities, net	-	(9,266)
Interest expense, net	(68,462)	(93,478)
Loss on disposal of subsidiaries	(4,271)	-
Sundry income	282,353	36,803
Total other income (expenses), net	<u>209,620</u>	<u>(65,941)</u>
Net loss	<u>\$ (2,658,887)</u>	<u>\$ (6,604,789)</u>
Less: net loss attributable to non-controlling interests	(15,091)	(1,117,685)
Net loss attributable to Aptorum Group Limited	<u>\$ (2,643,796)</u>	<u>\$ (5,487,104)</u>
Net loss per share – basic and diluted	\$ (0.50)	\$ (1.43)
Weighted-average shares outstanding – basic and diluted	<u>5,339,608</u>	<u>3,849,621</u>
Net loss	<u>\$ (2,658,887)</u>	<u>\$ (6,604,789)</u>
Other comprehensive income (loss)		
Exchange differences on translation of foreign operations	861	(7,485)
Other comprehensive income (loss)	<u>861</u>	<u>(7,485)</u>
Comprehensive loss	<u>(2,658,026)</u>	<u>(6,612,274)</u>
Less: comprehensive loss attributable to non-controlling interests	(15,091)	(1,117,685)
Comprehensive loss attributable to the shareholders of Aptorum Group Limited	<u>(2,642,935)</u>	<u>(5,494,589)</u>

About Aptorum Group

Aptorum Group Limited (Nasdaq: APM) is a clinical stage biopharmaceutical company dedicated to the discovery, development and commercialization of therapeutic assets to treat diseases with unmet medical needs, particularly in oncology (including orphan oncology indications) and infectious diseases. The pipeline of Aptorum is also enriched through the co-development of Paths^{Dx} Test, a novel molecular-based rapid pathogen identification and detection diagnostics technology, with Accelerate Technologies Pte Ltd, commercialization arm of the Singapore's Agency for Science, Technology and Research.

For more information about the Company, please visit www.aptorumgroup.com.

Disclaimer and Forward-Looking Statements

This press release does not constitute an offer to sell or a solicitation of offers to buy any securities of Aptorum Group.

This press release includes statements concerning Aptorum Group Limited and its future expectations, plans and prospects that constitute "forward-looking statements" within the meaning of the US Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue," or the negative of these terms or other similar expressions. Aptorum Group has based these forward-looking statements, which include statements regarding projected timelines for application submissions and trials, largely on its current expectations and projections about future events and trends that it believes may affect its business, financial condition and results of operations.

These forward-looking statements speak only as of the date of this press release and are subject to a number of risks, uncertainties and assumptions including, without limitation, risks related to its announced management and organizational changes, the continued service and availability of key personnel, its ability to expand its product assortments by offering additional products for additional consumer segments, development results, the company's anticipated growth strategies, anticipated trends and challenges in its business, and its expectations regarding, and the stability of, its supply chain, and the risks more fully described in Aptorum Group's Form 20-F and other filings that Aptorum Group may make with the SEC in the future. As a result, the projections included in such forward-looking statements are subject to change and actual results may differ materially from those described herein.

Aptorum Group assumes no obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

This press release is provided "as is" without any representation or warranty of any kind.

Contacts

Aptorum Group Limited
Investor Relations Department
investor.relations@aptorumgroup.com
+44 20 80929299

32

NYSCEF DOC. NO. 32

RECEIVED NYSCEF: 01/08/2025

F-1 1 ea126731-f1_aptorumgroup.htm REGISTRATION STATEMENT

As filed with the Securities and Exchange Commission on September 11, 2020

Registration No. 333-1●

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549FORM F-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933APTORUM GROUP LIMITED
(Exact Name of Registrant as Specified in its Charter)

Cayman Islands

(State or Other Jurisdiction of
Incorporation or Organization)

2834

(Primary Standard Industrial
Classification Code Number)

Not Applicable

(I.R.S. Employer
Identification No.)17 Hanover Square
London W1S 1BN, United Kingdom
Telephone: +44 020 80929299

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Copies to:

Louis Taubman, Esq.
Hunter Taubman Fischer & Li LLC
1450 Broadway, 26th Floor
New York, NY 10018
Tel: 917.512.0827
Fax: 212.202.6380Robert F. Charron
Ellenoff Grossman & Schole LLP
1345 Avenue of the Americas
New York, NY 10105-0302
Tel: (212) 370-1300

Approximate date of commencement of proposed sale to the public: As soon as practicable after effectiveness of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act or Rule 12b-2 of the Securities Exchange Act of 1934.

Emerging growth company ☒If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾	Amount of Registration Fee
Class A Ordinary Shares, par value \$1.00 per share ⁽²⁾	[•]	[•]
Pre-funded warrants to purchase Class A Ordinary Shares ⁽³⁾	[•]	[•]
Class A Ordinary Shares issuable upon exercise of the pre-funded warrants ⁽³⁾	[•]	[•]
Placement Agent warrants ⁽⁴⁾	[•]	[•]
Class A Ordinary Shares issuable upon exercise of the Placement Agent warrants ⁽⁴⁾	[•]	[•]
Total	\$ 15,000,000	\$ 1,947.00

(1) Estimated solely for the purpose of determining the amount of registration fee in accordance with Rule 457(c) under the Securities Act of 1933, as amended.

(2) In accordance with Rule 416(a), the Registrant is also registering an indeterminate number of additional Class A Ordinary Shares that shall be issuable pursuant to Rule 416 to prevent dilution resulting from share splits, share dividends or similar transactions.

(3) The proposed maximum aggregate offering price of the Class A Ordinary Shares will be reduced on a dollar-for-dollar basis based on the offering price of any pre-funded warrants sold in the offering, and the proposed maximum aggregate offering price of the pre-funded warrants to be sold in the offering will be reduced on a dollar-for-dollar basis based on the offering price of any Class A Ordinary Shares sold in the offering. Accordingly, the proposed maximum aggregate offering price of the Class A Ordinary Shares and pre-funded warrants (including the Class A Ordinary Shares issuable upon exercise of the pre-funded warrants), if any, is \$[•].

(4) Represents warrants issuable to H.C. Wainwright & Co., LLC (the "Placement Agent's Warrants") to purchase a number of Class A Ordinary Shares equal to 7.0% of the number of Class A Ordinary Shares and Pre-funded warrants being offered at an exercise price equal to 125% of the public offering price of the Class A Ordinary Shares.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a) may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED SEPTEMBER 11, 2020

PRELIMINARY PROSPECTUS



APTORUM GROUP LIMITED
September 11, 2020

Up to | | Class A Ordinary Shares
or
Up to | | Pre-Funded Warrants to Purchase Class A Ordinary Shares and
(and | | Class A Ordinary Shares Issuable Upon Exercise of the Pre-Funded Warrants)

We are offering in a best-efforts offering up to [●] Class A Ordinary Shares (the “Offering”) of securities of Aptorum Group Limited (referred to herein as “we”, “us”, “our”, “Registrant”, or the “Company”), at an offering price of \$[●] per share.

We are also offering to certain purchasers whose purchase of Class A Ordinary Shares in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Class A Ordinary Shares immediately following the consummation of this offering, the opportunity to purchase, if such purchasers so choose, pre-funded warrants in lieu of Class A Ordinary Shares that would otherwise result in any such purchaser’s beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Class A Ordinary Shares. Each pre-funded warrant will be exercisable for one Class A Ordinary Share and will be exercisable at any time after its original issuance until exercised in full. The purchase price of each pre-funded warrant will be equal to the price at which a Class A Ordinary Share is sold to the public in this offering, minus \$0.01, and the exercise price of each pre-funded warrant will be \$0.01 per share. This offering also relates to the Class A Ordinary Shares issuable upon exercise of any pre-funded warrants sold in this offering. For each pre-funded warrant we sell, the number of Class A Ordinary Shares we are offering will be decreased on a one-for-one basis.

Our Class A Ordinary Shares are traded on The NASDAQ Global Market under the symbol “APM” and the Professional Compartment of Euronext in Paris under the Euronext ticker symbol “APM.” On September 10, 2020, the last reported sale price of our Class A Ordinary Shares as reported on The NASDAQ Global Market was \$1.76 per share. There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. We do not intend to apply for listing of the pre-funded warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

The public offering price per share will be determined between us, the placement agent and purchasers based on market conditions at the time of pricing, and may be at a discount to the current market price of our Class A ordinary Shares. Therefore, the recent market price used throughout this prospectus may not be indicative of the actual public offering price.

There is no minimum number of securities or minimum aggregate amount of proceeds for this offering to close. The offering of the securities will terminate on the first date that we enter into securities purchase agreements to sell the securities offered hereby.

We are an emerging growth company, as defined in the U.S. Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, as such, have elected to comply with certain reduced public company reporting requirements.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 15 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Class A Ordinary Share	Per Pre-Funded Warrant	Total
Public offering price	\$ [●]	\$ [●]	\$ [●]
Placement Agent's fees(1)	\$ [●]	\$ [●]	\$ [●]
Proceeds, before expenses, to us(2)	\$ [●]	\$ [●]	\$ [●]

- (1) We have agreed to reimburse H.C. Wainwright & Co., LLC (the “Placement Agent”) for certain of its offering-related expenses, including a management fee of 1.0% of the gross proceeds raised in this offering. In addition, we have agreed to issue to the Placement Agent warrants to purchase up to a number of Class A Ordinary Shares equal to 7.0% of the number of Class A Ordinary Shares and pre-funded warrants being offered at an exercise price equal to 125% of the public offering price of Class A Ordinary Shares (the “Placement Agent’s Warrants”). See “Plan of Distribution” for additional information and a description of the compensation payable to the Placement Agent.
- (2) We estimate the total expenses of this offering payable by us, excluding the Placement Agent’s fees, will be approximately \$[•].

We engaged H.C. Wainwright & Co., LLC (“Wainwright” or the “Placement Agent”) as our exclusive placement agent to use its reasonable best efforts to solicit offers to purchase the Class A Ordinary Shares and pre-funded warrants in this offering. The Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities.

We anticipate that delivery of the securities against payment will be made on or about [•], 2020.

H.C. Wainwright & Co.

The date of this prospectus is September 11, 2020

TABLE OF CONTENTS

	Page
Commonly Used Defined Terms	ii
Industry and Market Data	v
Prospectus Summary	1
Offering Summary	14
Risk Factors	15
Special Note Regarding Forward-Looking Statements	61
Trademarks, Service Marks and Tradenames	62
Use of Proceeds	63
Dividend Policy	64
Capitalization	65
Dilution	66
Selected Financial Data	67
Quantitative And Qualitative Disclosures About Market Risk	69
Our Business	70
Management	105
Transactions With Related Persons	117
Security Ownership Of Certain Beneficial Owners And Management	124
Shares Eligible for Future Sale	127
Description Of Share Capital	128
Plan of Distribution	138
Taxation	141
Expenses Of This Offering	146
Legal Matters	146
Experts	147
Enforcement Of Civil Liabilities	147
Where You Can Find More Information	148
Incorporation Of Certain Information By Reference	149
Part II — Information Not Required In Prospectus	II-1

We have not authorized any person to provide you with information different from that contained in this prospectus or any related free-writing prospectus that we authorize to be distributed to you. This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any jurisdiction where the offer or sale is not permitted. The information in this prospectus speaks only as of the date of this prospectus unless the information specifically indicates that another date applies, regardless of the time of delivery of this prospectus or of any sale of the securities offered hereby.

For investors outside of the United States: We have not done anything that would permit this Offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the Offering and the distribution of this prospectus outside of the United States.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, you are cautioned not to give undue weight to this information.

All references in this prospectus to “\$,” “U.S.\$,” “U.S. dollars,” “dollars,” “US\$,” and “USD” mean United States dollars unless otherwise noted. All references to the “UK” in this prospectus refer to the United Kingdom. All references to the “PRC” or “China” in this prospectus refer to the People’s Republic of China. All references to “Hong Kong” or “H.K.” in this prospectus refer to Hong Kong Special Administrative Region of the People’s Republic of China. All references to the “United States,” “U.S.” or “US” refer to the United States of America.

COMMONLY USED DEFINED TERMS

- “505(b)(2) Application” refers to an application for which one or more of the investigations relied upon by the applicant for approval “were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted” (21 U.S.C. 355(b)(2)).
- “Acticle” refers to Acticle Life Sciences Limited, an 80% owned subsidiary of Aptorum Group.
- “Aeneas” refers to AENEAS CAPITAL LIMITED, a wholly-owned subsidiary of Aeneas Group Limited, which is an indirect wholly-owned subsidiary of Jurchen Investment Corporation through Aeneas Limited. Because Mr. Huen, our CEO, holds 100% equity interest in Jurchen Investment Corporation, we refer to Aeneas as a fellow subsidiary of Aptorum Group.
- “AGL” refers to Aeneas Group Limited, a wholly-owned subsidiary of Aeneas Limited and we refer to AGL as a fellow subsidiary of Aptorum Group.
- “AL” refers to Aeneas Limited, an entity 76.8% owned by Jurchen Investment Corporation and we refer to AL as a fellow subsidiary of Aptorum Group.
- “AML” refers to Aptorum Medical Limited, a 93% owned-subsiary of Aptorum Group.
- “AML Clinic” refers to an outpatient medical clinic operated by AML under the name of Talem Medical.
- “Annual Reports” refer collectively, to our annual report on Form 20-F and Form 20-F/A for the year ended December 31, 2018, filed with the SEC on April 15, 2019 and April 22, 2019, respectively, and our annual report on Form 20-F for the year ended December 31, 2019, filed with the SEC on April 29, 2020.
- “Aptorum Group,” “Company,” “we,” “Group” and “us” refer to Aptorum Group Limited, a Cayman Islands exempted company with limited liability whose principal place of business is in the United Kingdom.
- “Aptorum Non-Therapeutics Group” refers to the Company’s non-therapeutics segment that encompasses: (i) the development of surgical robotics and medical devices, which is operated through Signate Life Sciences Limited, (ii) AML Clinic and (iii) the sales of natural supplements through Nativus Life Sciences Limited.
- “Aptorum Therapeutics Group” refers to the Company’s therapeutics segment that is operated through its wholly-owned subsidiary, Aptorum Therapeutics Limited, a Cayman Islands exempted company with limited liability, whose principal place of business is in Hong Kong and its indirect subsidiary companies, whose principal places of business are in the United Kingdom, Singapore and Hong Kong.
- “Bond” refers to the \$15,000,000 convertible bond the Company originally issued to Peace Range (as hereinafter defined) in the Bond Offering, but which has since been repurchased by one of the Company’s wholly owned subsidiaries, Aptorum Investment Holding Limited, pursuant to that certain Bond Repurchase Agreement dated April 24, 2019 between the Company, Peace Range and Aptorum Investment Holding Limited, and which has matured and been redeemed on October 25, 2019.
- “Bond Offering” refers to the Company’s private offering of the Bond that closed on April 25, 2018.
- “cGCP” refers to Current Good Clinical Practice as adopted by the applicable regulatory authority.

- “cGMP” refers to Current Good Manufacturing Practice as adopted by the applicable regulatory authority.
- “cGMP” refers to Current Good Manufacturing Practice as adopted by the applicable regulatory authority.
- “Class A Ordinary Shares” refers to the Company’s Class A Ordinary Shares, par value \$1.00 per share.
- “Class B Ordinary Shares” refers to the Company’s Class B Ordinary Shares, par value \$1.00 per share.
- “CMC” refers to chemical, manufacturing and control.
- “Covar” refers to Covar Pharmaceuticals Incorporated, a contract research organization engaged by the Company.
- “CROs” refers to contract research organizations.
- “EEA” refers to the European Economic Area.
- “EMA” refers to the European Medicines Agency.
- “EMEA” refers to Europe, the Middle East and Africa.
- “EPO” refers to the European Patent Organization or the European Patent Office operated by it.
- “European Patent” refers to patents issuable by the EPO.
- “EU” refers to the European Union.
- “Exchange Act” refers to the U.S. Securities Exchange Act of 1934, as amended.
- “FDA” refers to U.S. Food and Drug Administration.
- “FDCA” refers to the U.S. Federal Food, Drug and Cosmetic Act.
- “Fiscal year” refers to the period from January 31 of each calendar year to December 31 of the following calendar year.
- “HC Wainwright” refers to H.C Wainwright & Co., LLC.
- “HKD” refers to Hong Kong Dollars.
- “Hong Kong” or “H.K.” refers to Hong Kong Special Administrative Region of the People’s Republic of China.
- “Hong Kong Doctors” refers to the doctors in Hong Kong under the employment of AML Clinic.
- “IND” refers to Investigational New Drugs.
- “IP” refers to intellectual property.
- “IPO” means the initial public offering by the Company of 761,419 Class A Ordinary Shares consummated on December 17, 2018.

- “Jurchen” refers to Jurchen Investment Corporation, a company wholly-owned by our CEO, Ian Huen, and a holding company of Aptorum Group.
- “Lead Projects” refers to two of the Company’s therapeutic projects ALS-4 and SACT-1.
- “Major Patent Jurisdictions” refers to the United States, member states of the European Patent Organization and the People’s Republic of China.
- “Nativus” refers to Nativus Life Sciences Limited, a wholly-owned subsidiary of Aptorum Group.
- “NMPA” refers to China’s National Medical Products Administration and its predecessor, the China Food and Drug Administration.
- “NDA” refers to a New Drug Application issued by the FDA.
- “Ordinary Shares” refers to the Class A Ordinary Shares and Class B Ordinary Shares collectively.
- “PRC” and “China” refer to the People’s Republic of China.
- “Registered Direct Offering” means the registered direct offering by the Company of 1,351,350 Class A Ordinary Shares and warrants to purchase up to 1,351,350 Class A Ordinary Share consummated on February 28, 2020.
- “Restructure” refers to the Company’s change from an investment fund with management shares and non-voting participating redeemable preference shares to a holding company with operating subsidiaries, effective as of March 1, 2017.
- “R&D” refers to research and development.
- “R&D Center” refers to a pharmaceutical development center located at Hong Kong Science and Technology Park.
- “Securities Exchange Commission,” “SEC,” “Commission” or similar terms refer to the United States Securities and Exchange Commission.
- “Sarbanes-Oxley Act” refers to the Sarbanes-Oxley Act of 2002.
- “Securities Act” refers to the U.S. Securities Act of 1933, as amended.
- “Series A Notes” refers to Series A convertible notes, at a purchase price of \$10,000 per note, sold in the Series A Note Offering.
- “Series A Note Investors” refers to the investors who purchased Series A Notes.
- “Series A Note Offering” refers to the private offering of Series A Notes, pursuant to Regulation S or Regulation D, as promulgated under the Securities Act that closed on May 15, 2018.
- “Signate” refers to Signate Life Sciences Limited, a wholly-owned subsidiary of Aptorum Group.
- “UK” refers to the United Kingdom.
- “United States,” “U.S.” and “US” refer to the United States of America.
- “Videns” refers to Videns Incorporation Limited, a wholly-owned subsidiary of Aptorum Group.
- “\$,” “U.S. \$,” “U.S. dollars,” “dollars,” “US\$” and “USD” refer to the United States dollars.

INDUSTRY AND MARKET DATA

This prospectus includes information with respect to market and industry conditions and market share from third-party sources or based upon estimates using such sources when available. We have not, directly or indirectly, sponsored or participated in the publication of any of such materials. We believe that such information and estimates are reasonable and reliable. We also assume the information extracted from publications of third-party sources has been accurately reproduced. We understand that the Company would be liable for the information included in this prospectus if any part of the information was incorrect, misleading or imprecise to a material extent.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read the entire prospectus, including our financial statements and the related notes and management's discussion and analysis incorporated herein by reference. You should also consider, among other things, the matters described under "Risk Factors" in each case appearing elsewhere in this prospectus. Unless otherwise stated, all references to "us," "our," "Aptorum," "we," "the "Company," "the "group" and similar designations refer to Aptorum Group Limited, a Cayman Islands exempted company with limited liability.

Overview

We are a pharmaceutical company dedicated to the discovery, development and commercializing of therapeutic assets to treat diseases with unmet medical needs, particularly infectious diseases and cancers (including orphan oncology indications). The pipeline of Aptorum is also enriched through the establishment of drug discovery platforms that enable the discovery of new therapeutics assets through, e.g. systematic screening of existing approved drug molecules, and microbiome-based research platform for treatments of metabolic diseases.

In addition to the above main focus, we are also pursuing therapeutic and diagnostic projects in neurology, gastroenterology, metabolic disorders, women's health and other disease areas. We also have projects focused on surgical robotics and natural supplement for women undergoing menopause and experiencing related symptoms. Also, we opened a medical clinic, AML Clinic, in June 2018.

Although none of our drug or device candidates have yet been approved for testing in humans, our goal is to develop a broad range of early stage novel therapeutics and diagnostics across a wide range of disease/therapeutic areas. Key components of our strategy for achieving this goal include:

- Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas;
- Selectively expanding our portfolio with potential products from our drug discovery platforms that may be able to attain orphan drug designation and/or satisfy current unmet medical needs;
- Collaborating with leading academic institutions and CROs;
- Expanding our pharmaceutical development capabilities;
- Leveraging our management's expertise, experience and commercial networks;
- Obtaining and leveraging government grants to fund project development.

We have begun to devote a significant percentage of our resources, which will include a substantial portion of the proceeds from this Offering, to the development of two drug candidates ("Lead Projects"). The drug candidates being advanced as the Lead Projects are ALS-4 and SACT-1, described in further detail below. If the results of the remaining preclinical studies of these drug candidates are positive, we expect to be able to submit in the fourth quarter of 2020, subject to regulatory review, an Investigational New Drug Application ("IND") for at least one of these candidates to the U.S. Food and Drug Administration ("FDA") or an equivalent application to the regulatory authorities in one or more other jurisdictions such as the China's National Medical Products Administration ("NMPA"), the European Medicines Agency ("EMA") and/or Health Canada. Acceptance of these applications by the relevant regulatory authority would enable the Company to begin testing that drug candidate in humans in that jurisdiction. Our ability to obtain any approval of such applications is entirely dependent upon the results of our preclinical studies, none of which have yet been completed.

Based on our evaluation of preliminary data and our consideration of a number of factors including substantial unmet needs, benefits over existing therapies, potential market size, competition in market, the Company decides how to prioritize its resources among projects. Overall, our rationale for selecting Lead Projects is not based on any mechanical formula or rigid selection criteria, but instead focused on a combination of the factors and individual attributes of the Lead Projects themselves.

Our current business consists of “therapeutics” and “non-therapeutics” segments. However, our focus is on the therapeutics segments. Because of the risks, costs and extended development time required for successful drug development, we have determined to pursue projects within our non-therapeutics segments, such as AML Clinic, to provide some interim revenue, as well as medical robots and natural supplements that may be brought to market and generate revenue more quickly.

Therapeutics Segment. In our therapeutics segment (“Aptorum Therapeutics Group”), we are currently seeking to develop various drug molecules and certain technologies for the treatment (“therapeutics”) and diagnosis (“diagnostics”) of human disease conditions to tackle unmet needs, in particular, our Lead Projects target infectious disease and cancer (including orphan oncology indications). In addition to our main areas of focus above, we are also pursuing therapeutic projects in neurology, gastroenterology, metabolic disorders, women’s health and other disease areas, as well as the development of natural supplements for women undergoing menopause and experiencing related symptoms. Aptorum Therapeutics Group is operated through Aptorum’s wholly-owned subsidiary, Aptorum Therapeutics Limited, a Cayman Islands exempted company with limited liability, whose principal place of business is in Hong Kong whose subsidiaries (who we sometimes refer to herein as project companies) are based in the United Kingdom, Singapore and Hong Kong.

Non-Therapeutics Segment. The non-therapeutics segment (“Aptorum Non-Therapeutics Group”) encompasses three businesses: (i) the development of surgical robotics and medical devices, (ii) AML Clinic and (iii) sales of natural supplements. The development of surgical robotics and medical devices business is operated through Signate Life Sciences Limited, a subsidiary of Aptorum Therapeutics Limited. The outpatient clinic is operated through our subsidiary, Aptorum Medical Limited. Effective as of March 2018, we leased office space in Central, Hong Kong as the home to AML Clinic. AML Clinic commenced operations under the name of Talem Medical in June 2018. The clinic is currently generating revenue. The sale of natural supplements is operated through Nativus Life Sciences Limited (“Nativus”), a subsidiary of Aptorum Therapeutics Limited. As part of the commercialization, the Group, through Nativus, entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products. Through Multipak, the Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group’s dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell®.

Prior to March 2017, the Company had pursued passive healthcare related investments in early stage companies primarily in the United States. However, we have since ceased pursuing further passive investment operations and intend to exit all such portfolio investments over an appropriate timeframe to focus resources on our current business.

On April 24, 2019, the Company signed an agreement with Aeneas Capital Limited, and A*ccelerate Technologies Pte. Ltd, the enterprise office of the Agency for Science, Technology and Research (“A*STAR”), (collectively, the “Parties”) to co-create local deep tech startups. This agreement, which is part of A*ccelerate’s venture co-creation (“VCC”) initiative, commits all parties to the co-creation of local startups in the healthcare and life science sector (the “Master Collaboration Agreement”). Through this agreement, we partnered with A*Star to explore suitable opportunities, if identified, to set up tech ventures in Singapore over the next 5 years. A*STAR shall contribute a total of up to \$30,000,000 to any suitable startups, at their discretion. The Company and Aeneas Capital Limited will contribute a total of up to \$30,000,000 to any suitable startups at their discretion with a focus on (i) securing pilot customers; (ii) incorporation of the startups as companies and financial commitments of such customers; (iii) capital raising and capital market plans; (iv) recruiting and building of the startup teams; (v) equipment and infrastructure; and (vi) licensing of IP to the startups under the Technology License Agreements. The Master Collaboration Agreement shall continue for a period of 5 years, unless otherwise terminated or extended by the Parties.

Aptorum’s Lead Projects

Based on our evaluation of preliminary data and our consideration of a number of factors including substantial unmet needs, benefits over existing therapies, potential market size, competition in market, the Company have decided to prioritize our resources in developing our two Lead Projects, namely, ALS-4 and SACT-1, among all our projects under development. Overall, our rationale for selecting Lead Projects was not based on any mechanical formula or rigid selection criteria, but instead focused on a combination of the factors and individual attributes of the Lead Projects themselves.



For the definition of different stages of development, such as Target Identification & Selection, Lead Discovery, Lead Optimization, etc., please refer to page 73.

ALS-4: Small molecule for the treatment of bacterial infections caused by Staphylococcus aureus including Methicillin-resistant Staphylococcus aureus (“MRSA”)

Bacteria such as *Staphylococcus aureus*, *Mycobacterium tuberculosis* and *Pseudomonas aeruginosa* have become “superbugs”, having developed resistance to many, if not all, of the existing drugs available to treat them, rendering those treatments ineffective in many instances. MRSA is one such bacterium, a gram-positive bacterium that is genetically different from other strains of Staphylococcus aureus. Staphylococcus aureus and MRSA can cause a variety of problems ranging from skin infections and sepsis to pneumonia and bloodstream infections. It is estimated that about one out of every three people (33%) carry Staphylococcus aureus in their nose, usually without any illness; about two in a hundred (2%) carry MRSA (source: <https://www.cdc.gov/mrsa/tracking/index.html>). Both adults and children may carry MRSA.

Most MRSA infections occur in people who have been in hospital or other health care settings, such as nursing homes and dialysis centers (source: <https://www.mayoclinic.org/diseases-conditions/mrsa/symptoms-causes/syc-20375336>), which is known as Healthcare-Associated MRSA (“HA-MRSA”). HA-MRSA infections are typically associated with invasive procedures or devices, such as surgeries, intravenous tubing or artificial joints. Another type of MRSA infection, known as Community-Associated MRSA (“CA-MRSA”), has occurred in wider community among healthy people. It often begins as a painful skin boil and spreads by skin-to-skin contact. About 85% of serious, invasive MRSA infections are healthcare associated infections (<https://www.cdc.gov/media/pressrel/2007/r071016.htm>). The incidence of CA-MRSA varies according to population and geographic location. In the U.S., more than 94,000 people develop serious MRSA infection and about 19,000 patients die as a result each year (<https://www.cdc.gov/media/pressrel/2007/r071016.htm>). According to the US Centers for Disease Control and Prevention (“CDC”), Staphylococcus aureus, including MRSA, caused about 11% of healthcare-associated infections in 2011 (source: <http://www.healthcommunities.com/mrsa-infection/incidence.shtml>). Each year in the U.S., around one out of every twenty-five hospitalized patients contracts at least one infection in the hospital (N Engl J Med. 2014; 27:370(13):1198-208). In the U.S., there were over 80,000 invasive MRSA infections and 11,285 related deaths in 2011 (source: <https://edition.cnn.com/2013/06/28/us/mrsa-fast-facts/index.html>). Indeed, severe MRSA infections most commonly occur during or soon after inpatient medical care. More than 290,000 hospitalized patients are infected with Staphylococcus aureus and of these staphylococcal infections, approximately 126,000 are related to MRSA (source: <http://www.healthcommunities.com/mrsa-infection/incidence.shtml>).

ALS-4 is a small drug molecule which appears to target the products produced by bacterial genes that facilitate the successful colonization and survival of the bacterium in the body or that cause damage to the body’s systems. These products of bacterial genes are referred to as “virulence expression.” Targeting bacterial virulence is an alternative approach to antimicrobial therapy that offers promising opportunities to overcome the emergence and increasing prevalence of antibiotic-resistant bacteria.

Professor Richard Kao from The University of Hong Kong (who is also the Founder and Principal Investigator of Acticle and Inventor of ALS-2, ALS-3 and ALS-4) initiated a high throughput approach for screening compounds which are active against virulence expression, which resulted in the discovery of ALS-2, ALS-3 and ALS-4.

ALS-4 targets an enzyme essential for *Staphylococcus aureus* (including MRSA) survival in vivo. This enzyme is involved in the production of Staphyloxanthin, a carotenoid pigment produced by *Staphylococcus aureus* including MRSA, and is responsible for the characteristic golden color. This pigment has proven to be an important factor in promoting bacterial invasion as well as rendering the bacteria resistant to attack from reactive oxygen species (ROS) and neutrophils. In other words, pigmented bacteria have increased resistance to the host's immune defenses. ALS-4 may have particular value if it can be shown to be an effective therapy in situations where a *Staphylococcus aureus* infection is resistant to available antibiotics (i.e., where the pathogen is MRSA).

In a recent study by the inventor, Prof. Richard Kao, ALS-4 demonstrates potent activity against *Staphylococcus aureus* pigment formation in vitro, as indicated in Figure 1, with an IC₅₀ (IC₅₀ is defined as the concentration of a drug which inhibits half of the maximal response of a biochemical process. In this case, inhibition of the formation of the golden pigment is the response) equal to 20 nM.

Figure 1

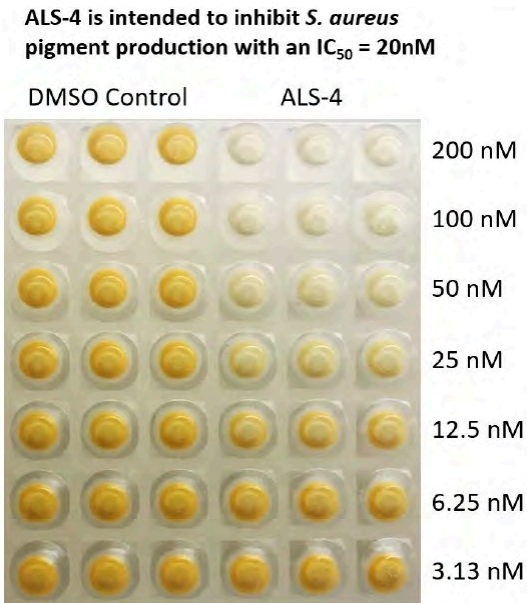


Figure 1: In vitro pigment inhibition by compound ALS-4.
(A) Inhibition of wild-type (WT) *Staphylococcus aureus* pigmentation in the presence of increasing concentrations of ALS-4.
(B) Pigment inhibition by ALS-4; the IC₅₀ for pigment formation is roughly 300 nM.
All data represent mean values ± SD.
NP16 = ALS-4
This assay was conducted in triplicate and repeated twice for confirmation
(Adapted from mBio (8(5): e01224, 2017))

By employing a systemic *Staphylococcus aureus* rat infection model, the treatment (10mg/kg of ALS-4 twice daily) and control groups (vehicle) were compared. In the lethal dose model, all the animals died by day 4 in the control group. On the contrary, the ALS-4 treated group showed >50% survival until the end of the study (Day 7), which is determined to be statistically significant compared with the control ($p = 0.0102$ by a Log-rank (Mantel-Cox) test.

(Mantel-Cox) test

In the delayed treatment model, ALS-4 brought a statistically significant reduction in bacterial count (99.5%) compared with the control ($p = 0.0126$ by an unpaired student's t-test).

Figure 2

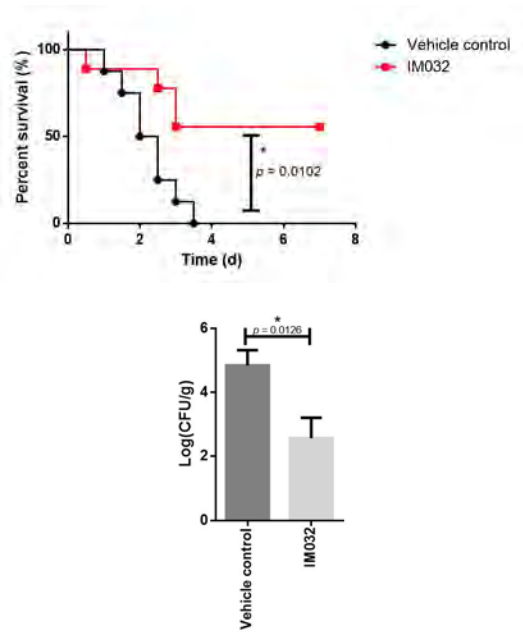


Figure 2: ALS-4 is observed to reduce bacterial load in mice

CFU = Colony Forming Unit, a unit used to estimate the number of viable bacteria in a sample

ALS-4 is currently undergoing IND enabling stage to prepare for regulatory submission for a Phase 1 clinical trial. The development of ALS-4 candidate has been progressing well and the first series of GLP toxicology studies have been completed through an appointed contract research organization (CRO) based in Canada. In particular, ALS-4 candidate did not show any mutagenicity in the in vitro Ames tests. ALS-4 development is on our proposed track and we target the related regulatory submission for a Phase 1 clinical trial in the second half year of 2020 in Canada.

Patent License

On October 18, 2017, the Company’s subsidiary, Acticle, entered into an exclusive license agreement with Versitech Limited, the licensing entity of HKU, for ALS-4. Subsequently on June 7, 2018, the parties entered into a first amendment to the exclusive license agreement, and on July 10, 2019, the parties entered into a second amendment to the license agreement.

On January 11, 2019, Acticle and Versitech Limited entered into a second license agreement for ALS-4, where Acticle exclusively licensed the intellectual property rights on certain HKU-owned improvements to the original licensed invention.

Under the exclusive license agreements, we were granted an exclusive, royalty-bearing, sublicensable licenses to develop, make, have made, use, sell, offer for sale and import products that are covered by the licensed patents (as described below). The territory of the licenses is worldwide and the field of the licenses is for treatment or prevention of bacterial infections caused by Staphylococcus aureus including MRSA and bacterial virulence.

We paid an upfront fee upon entering into the license agreements. We are required to pay less than 10% of the net sales of the licensed products sold by us or our affiliates as royalties, as well as a low teens percentage of sublicense royalties that we receive from our sublicensees, if any. In addition, we agreed to pay to the licensor aggregate regulatory milestones of up to US\$1 million subject to the following achievements: submission of investigational new drug application; completion of phase 1, 2 and 3 clinical trials; and submission of new drug application; grant of regulatory approval. We also agreed to pay to the licensor aggregate sales milestones of up to US\$7.8 million subject to the following achievement: first commercial sale; and annual net sales exceeding US\$100 million in one jurisdiction.

Pursuant to the license agreements, Acticle became the exclusive licensee of 2 pending U.S. non-provisional patent applications and 2 PCT applications (now expired). Prior to the expiration of the PCT applications, we filed national phase applications in member states of the EPO, in PRC and 11 other jurisdictions. The claimed inventions are described as: “Compounds Affecting Pigment Production and Methods for Treatment of Bacterial Diseases.”

Acticle has the right to grant sublicenses to third parties under the license agreements without prior approval from Versitech Limited and to assign the agreements to any successor to the business related to the licenses. In the event that Acticle makes an improvement to the licensed technologies, so long as the improvement does not incorporate any licensed patents, Acticle will be the owner to such improvement, subject to a non-exclusive royalty-free license being granted back to Versitech Limited for academic and research purposes only.

The exclusive license agreements shall be in effect until the expiration of all licensed patents (please refer to the patent expiration dates under “Item 4, Information on the Company – B. Business Overview – Intellectual Property”). Acticle may terminate the licenses at any time with 6-month written notice in advance. Either party may terminate the agreements upon a material breach by other party.

SACT-1: A Repurposed Drug for the Treatment of Neuroblastoma

Drug repurposing is a strategy for identifying new indications for approved or investigational drugs that are outside the scope of the original medical uses. It is often viewed as a lower-cost method for drug commercialization, as it is based on already-approved drugs (which has been proven to be safe for human use by the respective governing regulatory agency) and explores new target indications. (Ashburn, T. T. & Thor, K. B. Drug repositioning: identifying and developing new uses for existing drugs. Nat. Rev. Drug Discov. 3, 673–683, 2004).

One of the advantages of drug repurposing is a lower development risk due to safety and toxicity, as well as other properties related to water solubility, absorption, distribution and metabolism, as the safety and CMC profiles of marketed drugs are usually well-established. Due to the same reason, the development time is also shortened because there is no need to repeat the whole spectrum of the safety assessment. As a result, the drug repurposing approach appears to be attractive due to its superior risk management, smaller capital investment and quicker financial return. (Sudeep Pushpakom, et. al. Drug repurposing: progress, challenges and recommendations. Nat. Rev. Drug Discov. 18, 41-58, 2019)

The cost of bringing a repurposed drug is estimated to be around US\$300 million, which is only one-tenth of the development cost for a new drug. (Nosengo, N. Can you teach old drugs new tricks? Nature. 534, 314-316, 2016).

In summary, drug repurposing offers the following advantages:

- Well-established safety profiles: The development risk for new indications can be substantially reduced by applying existing drugs that are approved or have been shown to be safe in large scale late-stage trials. Since safety accounts for approximately 30% of drug failures in clinical trials, this is a key advantage that repositioned drugs can harness to great effect. (Key benefits of drug repositioning. (n.d.). Retrieved from <http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Time-saving: As repositioned drugs can rely on existing data, including efficacy and toxicity studies, the process is usually faster than de novo development. Developing a new chemical entity (NCE) can take 10 to 17 years, depending on indications. (Roin, B. N. Solving the Problem of New Uses, 2013). For a drug repositioning company, the development process from compound identification to launch can be around 3 to 8 years. (Walker, N. (2017, December 07). Accelerating Drug Development Through Repurposing, Repositioning and Rescue. Retrieved from <https://www.pharmoutsourcing.com/Featured-Articles/345076-Accelerating-Drug-Development-Through-Repurposing-Repositioning-and-Rescue/>)
- Cost-saving: Along with time-saving, money-saving is also a key benefit. With a single compound to enter clinical trials costing around US\$10 to \$20 million, the cost of identifying a repositioning candidate that already has phase 1 data could be as low as US\$2 to \$3 million. (<http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Potential for out-licensing: Pharmaceutical companies are said to be exploring new models to out-license some of their clinical drug candidates that may have been shelved for pure business reasons unrelated to safety or efficacy, even though they have met their endpoints and have proven themselves to be safe. If such drugs were to be repositioned, the pharmaceutical company increases the attractiveness of these drugs and gives itself more options to find interested buyers. (<http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Lower failure rate: According to BCC Research, approval rates for repurposed drugs are close to 30%, which is greater than the approval rate for new drug applications. (Front Oncol. 2017; 7: 273)

One of the major limitations of the current drug repurposing and repositioning practice is that there is a lack of a systematic way to identify and reinvestigate drugs that are approved and/or have failed approval.

SACT-1 is the first repurposed drug candidate to be developed under the Smart-ACT[®] drug discovery platform. SCAT-1 is one of the Company's proprietary technologies. Our first targeted indication is neuroblastoma. Neuroblastoma is a rare form of cancer, and classified as an orphan disease, that forms in certain types of nerve tissue and most frequently in the adrenal glands as well as spine, chest, abdomen or neck, predominantly in children, especially for those aged 5 years and below. For the high-risk group, which is close to 20% (Annu Rev Med. 2015; 66: 49-63.) of total new patient population per year, the 5-year survival rate of this condition is around 40-50% as observed by the American Cancer Society (<https://www.cancer.org/cancer/neuroblastoma/detection-diagnosis-staging/survival-rates.html>). The current high drug treatment cost for high risk patients can average USD200,000 per regimen (all 6 cycles) (https://www.cadth.ca/sites/default/files/pcodr/Reviews2019/10154DinutuximabNeuroblastoma_fnEGR_NOREDACT-ABBREV_Post_26Mar2019_final.pdf). In addition, most pediatric patients often do not tolerate or survive the relevant chemotherapy stage which, subject to further clinical studies, may be positively addressed by the SACT-1 candidate due to the potential synergistic effects when applied with standard chemotherapy.

In our recent studies, SACT-1 has been shown to be effective against numerous neuroblastoma cell lines, of which 2 are MYCN-amplified cells, which represent the high-risk neuroblastoma patient group. In addition, by using a bliss score as a quantitative measure of the extent of drug interaction, Aptorum Group has seen a high and robust synergism between SACT-1 and traditional chemotherapy in vitro (Figure 3), indicating a potential efficacy enhancement/dose reduction of the chemotherapy.

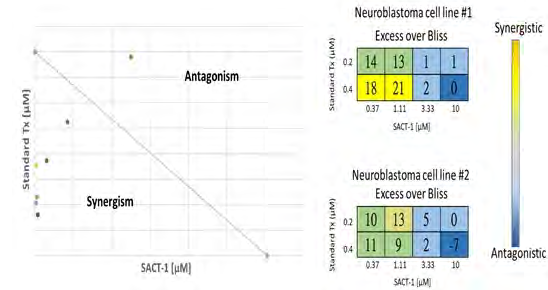


Figure 3 synergism between SACT-1 and traditional chemotherapy in vitro

In addition, in our recent study, the maximum tolerable dose of SACT-1 in a rodent model was determined to be higher than 400mg/kg. Compared with the MTD of standard chemotherapy such as paclitaxel (20-30mg/kg) (Clin Cancer Res. 5(11):3632-8) and cisplatin (6mg/kg) (BMC Cancer 17: 684 (2017)), the safety profile of SACT-1 appears to be very impressive. Based on our internal observations of pre-existing information from approved products, (subject to FDA's approval and on a case-by-case basis, a 505(b)(2) Application can rely in part on existing information from approved products (such as the FDA's previous findings on safety and efficacy) or products in literature (such as data available). However, typically speaking, the applicant is nonetheless required to carry out a Phase 1 bridging study to compare the Reference Listed Drug and reference the established safety and efficacy information), SACT-1 also exhibits a well-established safety profile: at 150mg/day, the death rate was 0% in prior clinical studies with no dosage related adverse events (Table 1). In addition, the pharmacokinetic profile of SACT-1 has also been reported (Table 2).

Table 1: Safety Profiles of SACT-1 in Human Clinical Trials

SACT-1	25mg/day (N=93)	75mg/day (N=95)	150mg/day (N=91)
Median treatment duration, weeks	101	100	100
Adverse events (AE)			
Any grade 2-4 AE at least possibly related to SP055	20%	20%	21%
AEs leading to discontinuation	9%	12%	14%
Any serious AE	13%	14%	10%
Deaths	0%	2%	0%

Table 2: The pharmacokinetic Profile of SACT-1 in Humans

SCAT-1 pharmacokinetic parameter in humans	(N=19)
t_{max} , h	5
C_{max} , ng/ml	~300
AUC_{last} , ng·h/ml	~10,000
AUC_{inf} , ng·h/ml	~11,000
$t_{1/2,term}$, h	~48

We are currently developing a pediatric formulation of SACT-1 to better address the needs of neuroblastoma patients who are exclusively children younger than 5. SACT-1 is undergoing preparation for IND submission and is on track for regulatory application to target to commence phase 1b/2a clinical trials under the US FDA's 505(b)(2) pathway.

Statistical Significance

The term statistical significance is to define the probability that a measured difference between two groups (e.g. two treatment groups, treatment versus control groups) is the result of a real difference in the tested variations and not the result of chance. It means that the result of a test does not appear randomly or by chance, but because of a specific change that is tested, so it can be attributed to a specific cause.

The confidence level indicates to what percentage the test results will not commit a type 1 error, the false positive. A false positive occurs when a change in the result is due to randomness (or other noise) and not the change in variations. At a 95% confidence level ($p = 0.05$), there is a 5% chance that the test results are due to a type 1 error. 95% has become the standard and usually be the minimum confidence level for the tests. To make the test more stringent, a 99% confidence level ($p = 0.01$) is also commonly employed, which means that there is a 1% chance that the test results are due to a type 1 error.

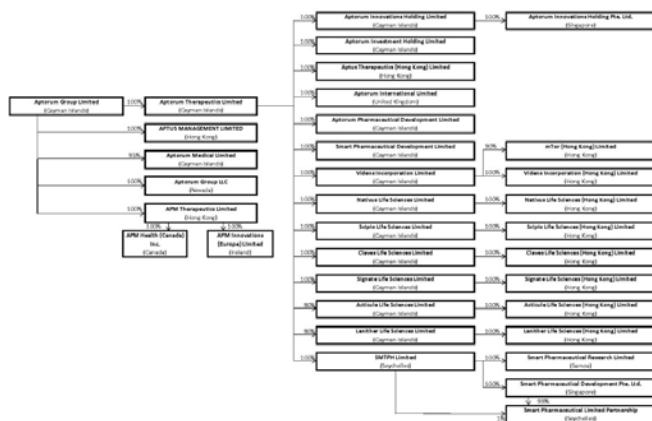
In other words, a p value represents the confidence level. For example, if the p-value for a test is < 0.05 , it means that there is less than 5% chance the difference between two groups is due to random error or by chance. If the p-value is < 0.01 , it means that there is less than 1% chance the difference between two groups is due to random error or by chance.

We employed statistical testing to compare different treatment groups in animal studies simply for proof of concept and to aid internal decision making for further development. We do not intend to use this standard for any regulatory submission. The US FDA or other regulatory agencies may not necessarily employ the same statistical standard to assess the efficacy in clinical trials, the results of which would be submitted for regulatory approval. Although a p-value of 0.05 has become the standard, the US FDA or other regulatory agencies may also individualize their efficacy standard for different clinical programs based on the indications, the purpose of a clinical trial, among others.

FDA Application Status

As of the date of this prospectus, we have not submitted any applications for investigational new drugs ("IND") to the US Food and Drug Administration ("FDA"). In the fourth quarter of 2020, subject to regulatory review, we expect to be in a position to submit at least one application for one of our drug candidates to commence trials in humans (INDs) to the FDA or an equivalent application to the regulatory authorities in another jurisdiction such as the China's National Medical Products Administration (the "NMPA") or the European Medicines Agency ("EMA"). However, there can be no assurance we will be able to make any such application by such time. Should we be delayed in making such filing or should such filing not be approved, our business will be adversely affected.

The following diagram illustrates our corporate structure as of the date of this prospectus. For more details regarding our corporate history and current structure, please refer to “Corporate History and Background” appearing on page 85 of this prospectus.



Controlled Company

As long as our officers and directors, either individually or in the aggregate, own at least 50% of the voting power of our Company, we will be a “controlled company” as defined under NASDAQ Marketplace Rules. However, even if we qualify as a “controlled company,” we do not intend to rely on the controlled company exemptions provided under NASDAQ Marketplace Rules. To that extent, we have set up the Audit Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee, all of which consist solely of independent directors and adopted a charter for each committee. For so long as we are a controlled company under that definition, we are permitted however to elect to rely, and may rely, on certain exemptions from corporate governance rules, including:

- an exemption from the rule that a majority of our board of directors must be independent directors;
- an exemption from the rule that the compensation of our chief executive officer must be determined or recommended solely by independent directors; and
- an exemption from the rule that our director nominees must be selected or recommended solely by independent directors.

As a result, you will not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

Although we do not intend to rely on the “controlled company” exemption under the Nasdaq listing rules, we could elect to rely on this exemption in the future. If we elect to rely on the “controlled company” exemption, a majority of the members of our board of directors might not be independent directors and our nominating and corporate governance and compensation committees might not consist entirely of independent directors. (See “Risk Factors – Risks Related to Our Corporate Structure – *As a “controlled company” under the rules of the NASDAQ Global Market, we may choose to exempt our company from certain corporate governance requirements that could have an adverse effect on our public shareholders.*”)

Risks Associated with Our Business

Investing in our securities involves risks. You should carefully consider the risks described in “Risk Factors” beginning on page 15 of this prospectus before making a decision to purchase our securities. If any of these risks actually occurs, our business, financial condition or results of operations would likely be materially adversely affected. In such case, the trading price of our Class A Ordinary Shares would likely decline, and you may lose all or part of your investment.

Recent Events

On August 27, 2020, we entered into certain warrant exchange agreements (the “Purchaser Exchange Agreements”) with two non-affiliated purchasers to purchase our Class A Ordinary Shares (the “Purchaser Warrant Exchange”); the purchasers were two of the purchasers in the Registered Direct Offering. Pursuant to the Purchaser Exchange Agreements, the Company and the purchasers agreed that in consideration for exchanging in full all of the Purchaser Exchange Warrants held by the purchasers, the Company will exchange one (1) Class A Ordinary Share for each one (1) Purchaser Exchange Warrant (“Purchaser Exchange Share”). To the extent a purchaser would otherwise beneficially own in excess of any beneficial ownership limitation applicable to such holder after giving effect to the Purchaser Warrant Exchange, the Company shall only issue such number of Class A Ordinary Shares to the purchaser that would not cause such purchaser to exceed the beneficial ownership limitation with the balance to be held in abeyance until written notice from the purchaser that the balance (or portion thereof) may be issued in compliance with the beneficial ownership limitation, which abeyance shall be evidenced through the existing warrant from the Registered Direct Offering, which shall be deemed prepaid thereafter, and exercised pursuant to a notice of exercise in the Warrants.

On July 24, 2020, our Class A Ordinary Shares began to trade on the Professional Compartment of the regulated market of Euronext Paris under the symbol “APM” and will be denominated in Euros on Euronext Paris.

On February 25, 2020, we entered into certain securities purchase agreement (the “Purchase Agreement”) to effect the Registered Direct Offering, with certain non-affiliated institutional investors and Jurchen Investment Corporation, the ultimate parent of the Group, pursuant to which we agreed to sell total 1,351,350 Class A Ordinary Shares (the “Shares”) and warrants (“Warrants”) to purchase 1,351,350 of the Shares, for gross proceeds of approximately \$10 million. The Warrants are exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. The purchase price for each Share and the corresponding Warrant was \$7.40. The Shares and Warrants were issued on February 28, 2020. Additionally, we issued 43,243 warrants to the placement agent on terms substantially the same as the Warrants except that the exercise price of the warrants issued to the Placement Agent was initially \$8.88. As a result of the Purchaser Warrant Exchange, the exercise prices of the Warrants, including those issued to the Placement Agent, were reduced to a nominal amount pursuant to the anti-dilution provisions in such warrants.

On January 30, 2020, the World Health Organization declared the coronavirus outbreak a “Public Health Emergency of International Concern” and on March 10, 2020, declared it to be a pandemic. Actions taken around the world to help mitigate the spread of the coronavirus include restrictions on travel, and quarantines in certain areas, and forced closures for certain types of public places and businesses. The coronavirus and actions taken to mitigate it have had and are expected to continue to have an adverse impact on the economies and financial markets of many countries, including the geographical area in which the Company operates. While the closures and limitations on movement, domestically and internationally, are expected to be temporary, if the outbreak continues on its current trajectory the duration of the supply chain disruption could reduce the availability, or result in delays, of materials or supplies to and from the Group, which in turn could materially interrupt the Group’s business operations. Given the speed and frequency of the continuously evolving developments with respect to this pandemic, the Group cannot reasonably estimate the magnitude of the impact to its consolidated results of operations. Additionally, it is reasonably possible that estimates made in the financial statements have been, or will be, materially and adversely impacted in the near term as a result of these conditions, including losses on investments; impairment losses related to long-lived assets and current obligations.

On January 14, 2020, we entered into a regional distribution agreement with Multipak Limited for the commercialization of our natural supplements for women undergoing menopause and experiencing related symptoms. The dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell®.

Our Securities

Our authorized share capital is divided into Class A Ordinary Shares and Class B Ordinary Shares. Holders of Class A Ordinary Shares and Class B Ordinary Shares have the same rights except for voting and conversion rights. In respect of matters requiring a shareholder vote, each Class A Ordinary Share will be entitled to one vote and each Class B Ordinary Share will be entitled to ten votes. Due to the Class B Ordinary Share’s voting power, the holders of Class B Ordinary shares currently and may continue to have a concentration of voting power, which limits the holders of Class A Ordinary Shares’ ability to influence corporate matters. (See “Risk Factors – Risks Related to our securities – ***Our Class B Ordinary Shares have greater voting power than our Class A Ordinary Shares and certain existing shareholders have substantial influence over our Company and their interests may not be aligned with the interests of our other shareholders.***”) Each Class B Ordinary Share is convertible into one Class A Ordinary Share at any time by the holder thereof. Class A Ordinary Shares are not convertible into Class B Ordinary Shares under any circumstances. (See “Description of Share Capital”)

Corporate Information

Our principal executive office is located at 17 Hanover Square, London W1S 1BN, United Kingdom. Our telephone number is +44 020 80929299.

Our website is www.aptorumgroup.com. **The information on our website is not part of this prospectus.**

Implications of Being an Emerging Growth Company

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act (the “JOBS Act”), and we are eligible to take advantage of certain exemptions from various reporting and financial disclosure requirements that are applicable to other public companies, that are not emerging growth companies, including, but not limited to, (1) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (2) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and (3) exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We intend to take advantage of these exemptions.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, for complying with new or revised accounting standards. As a result, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies.

We could remain an emerging growth company for up to five years, or until the earliest of (1) the last day of the first fiscal year in which our annual gross revenues exceed \$1.07 billion, (2) the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our Ordinary Shares that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter and we have been publicly reporting for at least 12 months, or (3) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period.

Implications of Being a Foreign Private Issuer

We are also considered a “foreign private issuer.” In our capacity as a foreign private issuer, we are exempted from certain rules under the U.S. Securities Exchange Act of 1934, as amended (“Exchange Act”), that impose certain disclosure obligations and procedural requirements for proxy solicitations under Section 14 of the Exchange Act. In addition, our officers, directors and principal shareholders are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and the rules under the Exchange Act with respect to their purchases and sales of our Class A Ordinary Shares. Moreover, we are not required to file periodic reports and financial statements with the U.S. Securities and Exchange Commission (“SEC”), as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. In addition, we are not required to comply with Regulation FD, which restricts the selective disclosure of material information.

We may take advantage of these exemptions until such time as we are no longer a foreign private issuer. We would cease to be a foreign private issuer at such time when more than 50% of our outstanding voting securities are held by U.S. residents and any of the following three circumstances applies: (1) the majority of our executive officers or directors are U.S. citizens or residents; (2) more than 50% of our assets are located in the United States; or (3) our business is administered principally in the United States.

We have taken advantage of certain reduced reporting and other requirements in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold equity securities.

Notes on Prospectus Presentation

Numerical figures included in this prospectus have been subject to rounding adjustments. Accordingly, numerical figures shown as totals in various tables may not be arithmetic aggregations of the figures that precede them. Certain market data and other statistical information contained in this prospectus is based on information from independent industry organizations, publications, surveys and forecasts. Some market data and statistical information contained in this prospectus are also based on management’s estimates and calculations, which are derived from our review and interpretation of the independent sources listed above, our internal research and our knowledge of pharmaceutical industry. While we believe such information is reliable, we have not independently verified any third-party information and our internal data has not been verified by any independent source.

Accordingly, actual events or circumstances may differ materially from events and circumstances that are assumed in this information and you are cautioned not to give undue weight to such data.

The Offering

Issuer:	Aptorum Group Limited
Class A Ordinary Shares being offered prior to us	Up to [●] Class A Ordinary Shares.
Price per share	[●]
Pre-funded Warrants being offered by us	We are also offering to certain purchasers whose purchase of Class A Ordinary Shares in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Class A Ordinary Shares immediately following the consummation of this offering, the opportunity to purchase, if such purchasers so choose, pre-funded warrants in lieu of Class A Ordinary Shares that would otherwise result in any such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Class A Ordinary Shares. The exercise price of each pre-funded warrant will equal \$0.01 per share. Each pre-funded warrant will be exercisable upon issuance and will not expire prior to exercise. For each pre-funded warrant we sell, the number of Class A Ordinary Shares we are offering will be decreased on a one-for-one basis. This prospectus also relates to the offering of the Class A Ordinary Shares issuable upon exercise of the pre-funded warrants.
Class A Ordinary Shares outstanding prior to this Offering (1)	8,491,526
Class A Ordinary Shares outstanding immediately following the consummation of this Offering	[●]
Symbol	Our Class A Ordinary Shares trade on the NASDAQ Global Market under the symbol APM.
Transfer Agent	Continental Stock Transfer & Trust Company
Risk Factors	Investing in our securities involves a high degree of risk and purchasers of our securities may lose part or all of their investment. See "Risk Factors" for a discussion of factors you should carefully consider before deciding to invest in our securities beginning on Page 15.
Use of Proceeds	Assuming all of the Class A Ordinary Shares and Pre-Funded Warrants are sold, we estimate that we will receive net proceeds from this Offering of up to \$[●] million, based on an initial offering price of \$[●], after deducting placement agent commissions and estimated offering expenses. We currently intend to use the net proceeds we receive from this Offering for general corporate purposes. See "Use of Proceeds" for additional information.
(1) The number of shares to be outstanding before this offering is based on 8,491,526 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares outstanding as of September 11, 2020 and excludes: <ul style="list-style-type: none">• 926,840 Class A Ordinary Shares issuable upon the exercise of share options outstanding; and• 854,053 Class A Ordinary Shares underlying outstanding warrants.	
Except as otherwise indicated, all information in this prospectus assumes: <ul style="list-style-type: none">• that the public offering price is \$[] per Class A Ordinary Share;• no exercise of 854,053 outstanding warrants;• no exercise of the Pre-Funded Warrants;• no exercise of the Placement Agent's Warrants;• no exercise of the 926,840 Class A Ordinary Shares issuable upon the exercise of share options outstanding.	

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the following risks and all other information contained in this prospectus, including our financial statements, consolidated financial statements and the related notes, before making an investment decision regarding our securities. The risks and uncertainties described below are those significant risk factors, currently known and specific to us that we believe are relevant to an investment in our securities. If any of these risks materialize, our business, financial condition or results of operations could suffer, the price of our Class A Ordinary Shares could decline and you could lose part or all of your investment.

Risks Related to the Preclinical and Clinical Development of Our Drug Candidates

We currently do not generate revenue from product sales and may never become profitable; unless we can raise more capital through additional financings, of which there can be no guarantee, our principal source of revenue will be from AML Clinic, which may not be substantial.

Our ability to generate revenue and become profitable depends upon our ability to successfully complete the development of, and obtain the necessary regulatory approvals for, the drug candidates in our Lead Projects and any future drug candidates we may develop, as we do not currently have any drugs that are available for commercial sale. We expect to continue to incur losses before commercialization of our drug candidates and any future drug candidates. None of our drug candidates has been approved for marketing in the U.S., Europe, the PRC or any other jurisdictions and may never receive such approval. Our ability to generate revenue and achieve profitability is dependent on our ability to complete the development of our drug candidates and any future drug candidates we develop in our portfolio, obtain necessary regulatory approvals, and have our drugs products under development manufactured and successfully marketed, of which there can be no guarantee. Although AML Clinic commenced operations in June 2018 and we have received some revenue from such operations, even at full capacity, AML Clinic may not bring enough revenue to support our operation and R&D. Thus, we may not be able to generate a profit until our drug candidates become profitable.

Even if we receive regulatory approval and marketing authorization for one or more of our drug candidates or one or more of any future drug candidates for commercial sale, a potential product may not generate revenue at all unless we are successful in:

- developing a sustainable and scalable manufacturing process for our drug candidates and any approved products, including establishing and maintaining commercially viable supply relationships with third parties;
- launching and commercializing drug candidates following regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor;
- obtaining market acceptance of our drug candidates as viable treatment options;
- addressing any competing technological and market developments;
- negotiating and maintaining favorable terms in any collaboration, licensing or other arrangement into which we may enter to commercialize drug candidates for which we have obtained required approvals and marketing authorizations; and
- maintaining, protecting and expanding our portfolio of IP rights, including patents, trade secrets and know-how.

In addition, our ability to achieve and maintain profitability depends on timing and the amount of expenses we will incur. Our expenses could increase materially if we are required by the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities to perform studies in addition to those that we currently have anticipated. Even if our drug candidates are approved for commercial sale, we anticipate incurring significant costs associated with the commercial launch of these products.

Our ability to become and remain profitable depends on our ability to generate revenue. Even if we are able to generate revenues from AML Clinic or the sale or sublicense of any products we may develop or license, we may not become profitable on a sustainable basis or at all. Our failure to become and remain profitable would decrease the value of our Company and adversely affect the market price of our Class A Ordinary Shares, which could impair our ability to raise capital, expand our business or continue our operations.

AML Clinic's operations may be our principal source of revenue for the foreseeable future and most likely, without additional financing, such revenue will not be sufficient for us to carry out all of our plans.

As stated above, we have not generated any revenue and do not foresee generating any revenue from our drug candidates in the near future. Effective as of March 2018, we leased the property in Central, Hong Kong that is the home to AML Clinic, which commenced operations in June 2018.

Until our therapeutic candidates produce revenue, our principal source of revenue is from AML Clinic, but we it is not sufficient by itself to fund our other operations. We believe that available cash, together with the efforts from management plans and actions described elsewhere in this registration statement, should enable the Company to meet presently anticipated cash needs for at least the next 12 months after the date that the financial statements are issued and the Company has prepared the consolidated financial statements on a going concern basis. However, the Company continues to have ongoing obligations and it expects that it will require additional capital in order to execute its longer-term development plan. If the Company encounters unforeseen circumstances that place constraints on its capital resources, management will be required to take various measures to conserve liquidity, which could include, but not necessarily be limited to, deferring some of its research and seeking to dispose of marketable securities. Management cannot provide any assurance that the Company will raise additional capital if needed.

We depend substantially on the success of the drug candidates being researched as our current Lead Projects, which are in the preclinical stage of development. The preclinical development, IND-enabling, and clinical trials of our drug candidates may not be successful. If we are unable to license or sublicense, sell or otherwise commercialize our drug candidates, or experience significant delays in doing so, our business will be materially harmed.

Our business and the ability to generate revenue related to product sales, if ever achieved, will depend on the successful development, regulatory approval and licensing or sublicensing or other commercialization of our drug candidates or any other drug candidates we may develop. We have invested a significant amount of financial resources in the development of our drug candidates and we may invest in other drug candidates. The success of our drug candidates and any other potential drug candidates will depend on many factors, including but not limited to:

- successful enrollment in, and completion of, studies in animals and clinical trials;
- other parties' ability in conducting our clinical trials safely, efficiently and according to the agreed protocol;
- receipt of regulatory approvals from the FDA, NMPA, EMA, Health Canada and other comparable regulatory authorities for our drug candidates;
- our ability to establish commercial manufacturing capabilities by making arrangements with third-party manufacturers;
- reliance on other parties to conduct our clinical trials swiftly and effectively;
- launch of commercial sales of our drug candidates, if and when approved;
- obtaining and maintaining patents, trade secrets and other IP protection and regulatory exclusivity, as well as protecting our rights in our own IP;

- ensuring that we do not infringe, misappropriate or otherwise violate patents, trade secrets or other IP rights of other parties;
- obtaining acceptance of our drug candidates by doctors and patients;
- obtaining reimbursement from third-party payors for our drug candidates, if and when approved;
- our ability to compete with other drug candidates and drugs; and
- maintenance of an acceptable safety profile for our drug candidates following regulatory approval, if and when received.

We may not achieve regulatory approval and commercialization in a timely manner or at all. Significant delays in obtaining approval for and/or to successfully commercialize our drug candidates would materially harm our business and we may not be able to generate sufficient revenues and cash flows to continue our operations.

Preclinical development is a long, expensive and uncertain process, and we may terminate one or more of our current preclinical development programs.

Traditionally, drug discovery and development is a time-consuming, costly and high-risk business. On average, the cost of launching a new drug is estimated to approach US\$2.6 billion and can take around 12 years to make it to the market (4 key benefits of drug repositioning. (n.d.). Retrieved from <http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>). Despite the huge expenditures, only approximately 1 in 1,000 potential drugs is graduated to human clinical trials after pre-clinical testing in the United States, (Norman, G. A. Drugs, Devices, and the FDA: Part 1. JACC: Basic to Translational Science, 1(3), 170-179, 2016) and nearly 86.2% of drug candidates entering phase 1 trials fails to achieve drug approval. (Wong C. H., Siah K. W. & Lo A. W. (2019, April), "Estimation of clinical trial success rates and related parameters," retrieved from <https://academic.oup.com/biostatistics/article/20/2/273/4817524>). Even after a drug is commercialized, there are just too many factors affecting the sales of pharmaceutical products, including unmet need/burden of disease (68.2%), clinical efficacy (47.3%), comparator choice (36.4%), safety profile (36.4%), and price (35.5%) (Sendyona, S., Odeyemi, I., & Maman, K. "Perceptions and factors affecting pharmaceutical market access: Results from a literature review and survey of stakeholders in different settings" Journal of Market Access & Health Policy, 4(1), 31660, 2016). In the end, on average, only 20% of approved new drugs generate revenues that exceed the average R&D investment. (Rosenblatt, M. (2014, December 19) "The Real Cost of "High-Priced" Drugs," retrieved from <https://hbr.org/2014/11/the-real-cost-of-high-priced-drugs>). We may determine that certain preclinical product candidates or programs do not have sufficient potential to warrant the allocation of resources toward them. Accordingly, we may elect to terminate our programs for and, in certain cases, our licenses to, such product candidates or programs. If we terminate a preclinical program in which we have invested significant resources, we will have expended resources on a program that will not provide a full return on our investment and missed the opportunity to have allocated those resources to potentially more productive uses.

Management has discretion to terminate the development of any of our projects at any time.

In light of the costs, both in time and expense, as well as the preclinical results and general business considerations, management may decide not to continue developing a particular preclinical program without announcement. Management will always base its decision on what it believes to be the most efficient use of the Company's resources to provide the most value to its shareholders. As a result, investors may not always be aware of the termination of a previously announced study or trial. The Company will continue to provide update on its active preclinical projects in its SEC filings and/or press releases, as appropriate.

We may not be successful in our efforts to identify or discover additional drug candidates. Due to our limited resources and access to capital, we must continue to prioritize development of certain drug candidates; such decisions may prove to be wrong and may adversely affect our business.

Although we intend to explore other therapeutic opportunities in addition to the drug candidates that we are currently developing, we may fail to identify other drug candidates for a number of reasons. For example, our research methodology may be unsuccessful in identifying potential drug candidates or those we identify may be shown to have harmful side effects or other undesirable characteristics that make them unmarketable or unlikely to receive regulatory approval.

Research programs to pursue the development of our drug candidates for additional indications and to identify new drug candidates and disease targets require substantial technical, financial and human resources whether or not we ultimately are successful. Our research programs may initially show promise in identifying potential indications and/or drug candidates, yet fail to yield results for clinical development for a number of reasons, including but not limited to:

- the research methodology used may not be successful in identifying potential indications and/or drug candidates;
- potential drug candidates may, after further study, be shown to have harmful adverse effects or other characteristics that indicate they are unlikely to be effective drugs; or
- it may take greater human and financial resources to identify additional therapeutic opportunities for our drug candidates or to develop suitable potential drug candidates through internal research programs than we will possess, thereby limiting our ability to diversify and expand our drug portfolio.

Because we have limited financial and managerial resources, we have chosen to focus at present on our two Lead Projects, which may ultimately prove to be unsuccessful. As a result of this focus, we may forego or delay pursuit of opportunities with other drug candidates, or for other indications that later prove to have greater commercial potential or a greater likelihood of success. Even if we determine to pursue alternative therapeutic or diagnostic drug candidates, these other drug candidates or other potential programs may ultimately prove to be unsuccessful. In short, our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.

Accordingly, there can be no assurance that we will ever be able to develop suitable potential drug candidates through internal research programs. This could materially adversely affect our future growth and prospects.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

While we have not commenced any clinical trials, assuming we obtain approval to do so from at least one regulatory authority, of which there can be no assurance, timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who meet the trial criteria and remain in the trial until its conclusion. We may experience difficulties enrolling and retaining appropriate patients in our clinical trials for a variety of reasons, including but not limited to:

- the size and nature of the patient population;
- patient eligibility criteria defined in the clinical protocol;
- the size of study population required for statistical analysis of the trial's primary endpoints;
- the proximity of patients to trial sites;
- the design of the trial and changes to the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials for similar therapies or other new therapeutics exist and will reduce the number and types of patients available to us;

- clinicians' and patients' perceptions as to the potential advantages and side effects of the drug candidate being studied in relation to other available therapies, including any new drugs or treatments that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents;
- patients enrolled in clinical trials may not complete a clinical trial; and
- the availability of approved therapies that are similar to our drug candidates.

Even if we are able to enroll a sufficient number of patients in our clinical trials, delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our drug candidates.

Clinical drug development involves a lengthy and expensive process and could fail at any stage of the process. We have limited experience in conducting clinical trials and results of earlier studies and trials may not be reproduced in future clinical trials.

For our drug candidates, clinical testing is expensive and can take many years to complete, while failure can occur at any time during the clinical trial process. The results of studies in animals and early clinical trials of our drug candidates may not predict the results of later-stage clinical trials. Drug candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through studies in animals and initial clinical trials. In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same drug candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations (including genetic differences), patient adherence to the dosing regimen and the patient dropout rate. Results in later trials may also differ from earlier trials due to a larger number of clinical trial sites and additional countries and languages involved in such trials. In addition, the design of a clinical trial can determine whether its results will support approval of a drug candidate, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced and significant expense has been incurred.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of demonstrated efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Clinical trials of potential products often reveal that it is not practical or feasible to continue development efforts. Furthermore, if the trials we conduct fail to meet their primary statistical and clinical endpoints, they will not support the approval from the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities for our drug candidates. If this occurs, we would need to replace the failed study with new trials, which would require significant additional expense, cause substantial delays in commercialization and materially adversely affect our business, financial condition, cash flows and results of operations. (See "We are subject to risks related to the carrying out and outcome of clinical trials of medical devices")

If clinical trials of our drug candidates fail to demonstrate safety and efficacy to the satisfaction of the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities, or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.

Before applying for and obtaining regulatory approval for the sale of any of our drug candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and may fail. A failure of one or more of our clinical trials can occur at any stage of testing and successful interim results of a clinical trial do not necessarily predict successful final results.

We and our CROs are required to comply with current Good Clinical Practices ("cGCP") requirements, which are regulations and guidelines enforced by the FDA, NMPA, EMA, Health Canada and other comparable regulatory authorities for all drugs in clinical development. Regulatory authorities enforce these cGCP through periodic inspections of trial sponsors, principal investigators and trial sites. Compliance with cGCP can be costly and if we or any of our CROs fail to comply with applicable cGCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, NMPA, EMA, Health Canada or comparable regulatory authorities may require us to perform additional clinical trials before approving our marketing applications.

We may experience numerous unexpected events during, or as a result of, clinical trials that could delay or prevent our ability to receive regulatory approval or commercialize our drug candidates, including but not limited to:

- regulators, institutional review boards ("IRBs") or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs;
- the number of patients required for clinical trials of our drug candidates may be larger than we anticipate, enrollment may be insufficient or slower than we anticipate or patients may drop out at a higher rate than we anticipate;
- our contractors and investigators may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical trials of our drug candidates for various reasons, including a lack of clinical response or a determination that participants are being exposed to unacceptable health risks;
- regulators, IRBs or ethics committees may require that we or our investigators suspend or terminate clinical research for various reasons, including non-compliance with regulatory requirements;
- the cost of clinical trials of our drug candidates may be greater than we anticipate;
- the supply or quality of our drug candidates or other materials necessary to conduct clinical trials of our drug candidates may be insufficient or inadequate; and
- our drug candidates may cause adverse events, have undesirable side effects or other unexpected characteristics, causing us, our investigators, or regulators to suspend or terminate the trials.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if they raise safety concerns, we may:

- be delayed in obtaining regulatory approval for our drug candidates;
- not obtain regulatory approval at all;
- obtain approval for indications that are not as broad as intended;
- have a drug removed from the market after obtaining regulatory approval;
- be subject to additional post-marketing testing requirements;
- be subject to restrictions on how a drug is distributed or used; or
- be unable to obtain reimbursement for use of a drug.

Delays in testing or approvals may result in increases in our drug development costs. We do not know whether any clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, or at all. Clinical trials may produce negative or inconclusive results. Moreover, these trials may be delayed or proceed less quickly than intended. Delays in completing our clinical trials will increase our costs, slow down our drug candidate development and approval process, and jeopardize our ability to commence product sales and generate revenues and we may not have sufficient funding to complete the testing and approval process. Any of these events may significantly harm our business, financial condition and prospects, lead to the denial of regulatory approval of our drug candidates or allow our competitors to bring drugs to market before we do, impairing our ability to commercialize our drugs if and when approved.

Significant clinical trial delays also could shorten any periods during which we have the exclusive right to commercialize our drug candidates or allow our competitors to bring products to market before we do, impair our ability to commercialize our drug candidates and may harm our business and results of operations.

We may in the future conduct clinical trials for our drug candidates in sites outside the U.S. and the FDA may not accept data from trials conducted in such locations.

We may in the future conduct certain of our clinical trials outside the U.S. Although the FDA may accept data from clinical trials conducted outside the U.S. for our New Drug Application ("NDA"), acceptance of this data is subject to certain conditions imposed by the FDA. There can be no assurance the FDA will accept data from any of the clinical trials we conduct outside the U.S. If the FDA does not accept the data from any of our clinical trials conducted outside the U.S., it would likely result in the need for additional clinical trials in the U.S., which would be costly and time-consuming and could delay or prevent the commercialization of any of our drug candidates.

Risks Related to Obtaining Regulatory Approval for Our Drug Candidates

The regulatory approval processes of the FDA, NMPA, EMA, Health Canada and other comparable regulatory authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our current drug candidates or any future drug candidates we may develop, our business will be substantially harmed.

We cannot commercialize drug candidates without first obtaining regulatory approval to market each drug from the FDA, NMPA, EMA, Health Canada or comparable regulatory authorities. Before obtaining regulatory approvals for the commercial sale of any drug candidate for a target indication, we must demonstrate in studies in animals and well-controlled clinical trials, and, with respect to approval in the United States and other regulatory agencies, to the satisfaction of the FDA, NMPA, EMA, Health Canada or comparable regulatory authorities, that the drug candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate.

The time required to obtain approval from the FDA, NMPA, EMA, Health Canada and other comparable regulatory authorities is unpredictable but typically takes many years following the commencement of studies in animals and clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities.

In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval can differ among regulatory authorities and may change during the course of the development of a drug candidate. We have not obtained regulatory approval for any drug candidate. It is possible that neither our existing drug candidates nor any drug candidates we may discover or acquire for development in the future will ever obtain regulatory approval. Even if we obtain regulatory approval in one jurisdiction, we may not obtain it in other jurisdictions.

Our drug candidates could fail to receive regulatory approval from any of the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities for many reasons, including but not limited to:

- disagreement with regulators regarding the design or implementation of our clinical trials;
- failure to demonstrate that a drug candidate is safe and effective or safe, pure and potent for its proposed indication;
- failure of clinical trial results to meet the level of statistical significance required for approval;
- failure to demonstrate that a drug candidate's clinical and other benefits outweigh its safety risks;
- disagreement with regulators regarding our interpretation of data from studies in animals or clinical trials;
- insufficiency of data collected from clinical trials of our drug candidates to support the submission and filing of a New Drug Application ("NDA"), or other submission or to obtain marketing approval;
- the FDA, NMPA, EMA, Health Canada or a comparable regulatory authority's finding of deficiencies related to the manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies; and
- changes in approval policies or regulations that render our preclinical studies and clinical data insufficient for approval.

Any of the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities may require more information, including additional preclinical studies or clinical data, to support approval, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program. If we were to obtain approval, regulatory authorities may approve any of our drug candidates for fewer or more limited indications than we request. Regulatory authorities also may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a drug candidate with a label that is not desirable for the successful commercialization of that drug candidate. In addition, if our drug candidate produces undesirable side effects or involves other safety issues, the FDA may require the establishment of a Risk Evaluation Mitigation Strategy ("REMS"), or NMPA, EMA, Health Canada or other comparable regulatory authorities may require the establishment of a similar strategy. Such a strategy may, for instance, restrict distribution of our drug candidates, require patient or physician education, or impose other burdensome implementation requirements on us.

Regulatory approval may be substantially delayed or may not be obtained for one or all of our drug candidates if regulatory authorities require additional time or studies to assess the safety or efficacy of our drug candidates.

We currently do not have any drug candidates that have gained approval for sale by the FDA, NMPA or EMA, Health Canada or other regulatory authorities in any other country, and we cannot guarantee that we will ever have marketable drugs. Our business is substantially dependent on our ability to complete the development of, obtain marketing approval for and successfully commercialize drug candidates in a timely manner. We cannot commercialize drug candidates without first obtaining marketing approval from the FDA, NMPA, EMA, Health Canada and comparable regulatory authorities. In the U.S., we hope to file INDs for the drug candidates from our Lead Projects and, subject to the approval of IND, Phase 1 clinical trials in humans. Even if we are permitted to commence such clinical trials, they may not be successful and regulators may not agree with our conclusions regarding the data generated by our clinical trials.

We may be unable to complete development of our drug candidates or initiate or complete development of any future drug candidates we may develop on our projected schedule. While we believe that our existing cash will likely enable us to complete the preclinical development of at least one of our current Lead Projects, the full clinical development, manufacturing and launch of that drug candidate, will take significant additional time and likely require funding beyond the existing cash. In addition, if regulatory authorities require additional time or studies to assess the safety or efficacy of our drug candidates, we may not have or be able to obtain adequate funding to complete the necessary steps for approval for our drug candidates or any future drug candidates.

Preclinical studies in animals and clinical trials in humans to demonstrate the safety and efficacy of our drug candidates are time-consuming, expensive and take several years or more to complete. Delays in preclinical or clinical trials, regulatory approvals or rejections of applications for regulatory approval in the U.S., Europe, the PRC or other markets may result from many factors, including but not limited to:

- our inability to obtain sufficient funds required to conduct or continue a trial, including lack of funding due to unforeseen costs or other business decisions;
- regulatory reports for additional analysts, reports, data, preclinical studies and clinical trials;
- failure to reach agreement with, or inability to comply with conditions imposed by the FDA, NMPA, EMA, Health Canada or other regulators regarding the scope or design of our clinical trials;
- regulatory questions regarding interpretations of data and results and the emergence of new information regarding our drug candidates or other products;
- delay or failure in obtaining authorization to commence a clinical trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;
- withdrawal of clinical trial sites from our clinical trials as a result of changing standards of care or the ineligibility of a site to participate in our clinical trials;
- unfavorable or inconclusive results of clinical trials and supportive non-clinical studies, including unfavorable results regarding effectiveness of drug candidates during clinical trials;
- difficulty in maintaining contact with patients during or after treatment, resulting in incomplete data;
- our inability to obtain approval from IRBs or ethics committees to conduct clinical trials at their respective sites;
- our inability to enroll and retain a sufficient number of patients who meet the inclusion and exclusion criteria in a clinical trial;
- our inability to conduct a clinical trial in accordance with regulatory requirements or our clinical protocols;
- clinical sites and investigators deviating from trial protocol, failing to conduct the trial in accordance with regulatory requirements, withdrawing from or dropping out of a trial, or becoming ineligible to participate in a trial;
- failure of our clinical trial managers to satisfy their contractual duties or meet expected deadlines;
- manufacturing issues, including problems with manufacturing or timely obtaining from third parties sufficient quantities of a drug candidate for use in a clinical trial;
- ambiguous or negative interim results, or results that are inconsistent with earlier results;
- feedback from the FDA, NMPA, EMA, Health Canada, an IRB, data safety monitoring boards, or comparable entities, or results from earlier stage or concurrent studies in animals and clinical trials, regarding our drug candidates, including which might require modification of a trial protocol;
- unacceptable risk-benefit profile or unforeseen safety issues or adverse side effects; and
- a decision by the FDA, NMPA, EMA, Health Canada, an IRB, comparable entities, or the Company, or recommendation by a data safety monitoring board or comparable regulatory entity, to suspend or terminate clinical trials at any time for safety issues or for any other reason.

Changes in regulatory requirements and guidance may also occur, and we may need to amend clinical trial protocols submitted to applicable regulatory authorities to reflect these changes. Amendments may require us to resubmit clinical trial protocols to IRBs or ethics committees for re-examination, which may increase the costs or time required to complete a clinical trial.

If we experience delays in the completion of, or the termination of, a clinical trial, of any of our drug candidates, the commercial prospects of our drug candidates will be harmed, and our ability to generate product sales revenues from any of those drug candidates will be delayed. In addition, any delay in completing our clinical trials will increase our costs, slow down our drug candidate development and approval process, and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our drug candidates.

If we are required to conduct additional clinical trials or other studies with respect to any of our drug candidates beyond those that we initially contemplated, if we are unable to successfully complete our clinical trials or other studies or if the results of these studies are not positive or are only modestly positive, we may be delayed in obtaining regulatory approval for that drug candidate, we may not be able to obtain regulatory approval at all or we may obtain approval for indications that are not as broad as intended. Our product development costs will also increase if we experience delays in testing or approvals, and we may not have sufficient funding to complete the testing and approval process. Significant clinical trial delays could allow our competitors to bring their products to market before we do and impair our ability to commercialize our drugs, if and when approved. If any of this occurs, our business will be materially harmed.

Our drug candidates may cause undesirable adverse events or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following any regulatory approval.

Undesirable adverse events caused by our drug candidates or any future drug candidates we may develop could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities. Results of our potential clinical trials could reveal a high and unacceptable severity or prevalence of adverse effects. In such event, our trials could be suspended or terminated and the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities could order us to cease further development of, or deny approval of, our drug candidates for any or all target indications. Drug-related adverse events could also affect patient recruitment or the ability of enrolled subjects to complete the trial, could result in potential product liability claims and may harm our reputation, business, financial condition and business prospects significantly.

Additionally, if any of our current or future drug candidates receives regulatory approval, and we or others later identify undesirable side effects caused by such drugs, a number of potentially significant negative consequences could result, including but not limited to:

- suspending the marketing of the drug;
- having regulatory authorities withdraw approvals of the drug;
- adding warnings on the label;
- developing a REMS for the drug or, if a REMS is already in place, incorporating additional requirements under the REMS, or to develop a similar strategy as required by a comparable regulatory authority;

- conducting post-market studies;
- being sued and held liable for harm caused to subjects or patients; and
- damage to our reputation.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular drug candidate, if approved, and could significantly harm our business, results of operations and prospects.

Even if we receive regulatory approval for our drug candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our drug candidates.

If our drug candidates or any future drug candidates we develop are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable regulatory authorities outside of the United States.

Manufacturers and manufacturers' facilities are required to comply with extensive requirements from the FDA, NMPA, EMA, Health Canada and comparable regulatory authorities, including, in the United States, ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our drug candidates may be subject to limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the drug candidate. The regulatory authorities may also require risk management plans or programs as a condition of approval of our drug candidates (such as REMS of the FDA and risk-management plan of the EMA), which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA, NMPA, EMA, Health Canada or a comparable regulatory authority approves our drug candidates, we will have to comply with requirements including, for example, submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGCP and cGMP, for any clinical trials that we conduct post-approval.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the drug reaches the market. Later discovery of previously unknown problems with our drug candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our drug candidates, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, untitled or warning letters, or holds on clinical trials;

- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- product seizure or detention, or refusal to permit the import or export of our drug candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Companies may promote drugs only for the approved indications and in accordance with the provisions of the approved label and may not promote drugs for any off-label use, such as uses that are not described in the product's labeling and that differ from those approved by the regulatory authorities. However, physicians may prescribe drug products for off-label uses and such off-label uses are common across some medical specialties. Thus, they may, unbeknownst to us, use our product for an "off label" indication for a specific treatment recipient. The FDA, NMPA, EMA, Health Canada and other regulatory authorities actively enforce the laws and regulations prohibiting the promotion of off-label uses, and if we are found to be out of compliance with the requirements and restrictions imposed on us under those laws and restrictions, we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions, and the off-label use of our products may increase the risk of product liability claims. In addition, management's attention could be diverted from our business operations and our reputation could be damaged.

The policies of the FDA, NMPA, EMA, Health Canada and other regulatory authorities may change and we cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any regulatory approval that we may have obtained and we may not achieve or sustain profitability.

Risks Related to Commercialization of Our Drug Candidates

Even if any of our drug candidates receive regulatory approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

After we complete clinical trials and receive regulatory approval for any of our drug candidates, which may not happen for some time, we recognize that such candidate(s) may ultimately fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. We may not be able to achieve or maintain market acceptance of our products over time if new products or technology are introduced that are more favorably received than our products, are more cost effective or render our drug obsolete. We will face competition with respect to our drug candidates from other pharmaceutical companies developing products in the same disease/therapeutic area and specialty pharmaceutical and biotechnology companies worldwide. Many of the companies against which we may be competing have significantly greater financial resources and expertise in research and development, manufacturing, animal testing, conducting clinical trials, obtaining regulatory approvals and marketing approval for drugs than we do. Physicians, patients and third-party payors may prefer other novel products to ours, which means that we may not generate significant sales revenues for that product and that product may not become profitable. The degree of market acceptance of our drug candidates, if approved for commercial sale, will depend on a number of factors, including but not limited to:

- clinical indications for which our drug candidates are approved;
- physicians, hospitals, and patients considering our drug candidates as a safe and effective treatment;
- the potential and perceived advantages of our drug candidates over alternative treatments;
- the prevalence and severity of any side effects;

- product labeling or product insert requirements of the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities;
- the timing of market introduction of our drug candidates as well as competitive drugs;
- the cost of treatment in relation to alternative treatments and their relative benefits;
- the availability of adequate coverage, reimbursement and pricing by third-party payors and government authorities;
- lack of experience and financial and other limitations on our ability to create and sustain effective sales and marketing efforts or ineffectiveness of our sales and marketing partners; and
- changes in legislative and regulatory requirements that could prevent or delay regulatory approval of our drug candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any drug candidates for which we obtain regulatory approval.

Risks Related to Our IP

A significant portion of our IP portfolio currently includes pending patent applications that have not yet been issued as granted patents and if the pending patent applications covering our product candidates fail to be issued, our business will be adversely affected. If we or our licensors are unable to obtain and maintain patent protection for our technology and drugs, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be adversely affected.

Our success depends largely on our ability to obtain and maintain patent protection and other forms of IP rights for the composition of matter, method of use and/or method of manufacture for each of our drug candidates. Failure to obtain, maintain protection, enforce or extend adequate patent and other IP rights could materially adversely affect our ability to develop and market one or more of our drug candidates. We also rely on trade secrets and know-how to develop and maintain our proprietary and IP position for each of our drug candidates. Any failure to protect our trade secrets and know-how with respect to any specific drug and device candidate could adversely affect the market potential of that potential product.

As of the date hereof, the Company has, through its licenses, obtained rights to patents and patent applications covering some or all its drug and device candidates that have been filed in major jurisdictions such as the United States, member states of the European Patent Organization (the “EPO”) and the PRC (collectively, “Major Patent Jurisdictions”), as well as in other countries.

As of the date of this report, the Company has, through its licenses, obtained rights to patents and patent applications covering some or all its drug and device candidates that have been filed in major jurisdictions such as the United States, member states of the European Patent Organization (the “EPO”) and the PRC (collectively, “Major Patent Jurisdictions”), as well as in other countries. We have also filed a number of provisional applications to establish earlier filing dates for certain of our other ongoing researches, the specifics of which are currently proprietary and confidential. To the extent we do not seek or obtain patent protection in a particular jurisdiction, we may not have commercial incentive to seek marketing authorization in such jurisdiction. Nonetheless, other parties might enter those markets with generic versions or copies of our products and received regulatory approval without having significantly invested in their own research and development costs compared to the Company’s investment. For more information about our IP portfolio, please refer to the Intellectual Property section below.

With respect to issued patents in certain jurisdictions, for example in the U.S. and under the EPO, we may be entitled to obtain a patent term extension to extend the patent expiration date provided we meet the applicable requirements for obtaining such patent term extensions. We have sought to support our proprietary position by working with our licensors in filing patent applications in the names of the licensors in the United States and through the PCT, related to the Lead Projects and certain other drug candidates. In the future, we intend to file patent applications on supplemental or improvement IP derived from the licensed technologies, where those IP would be solely or jointly owned by the Company pursuant to the terms of respective license agreements. Filing patents covering multiple technologies in multiple countries is time-consuming and expensive, and we may not have the resources file and prosecute all necessary or desirable patent applications in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

We cannot be certain that patents will be issued or granted with respect to patent applications that are currently pending, or that issued or granted patents will not later be found to be invalid or unenforceable.

The patent position of biotechnology and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations. The standards applied by the EPO, the U.S. Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and pharmaceutical patents. Consequently, patents may not issue from our pending patent applications and even if they do issue, such patents may not issue in a form that effectively prevents others from commercializing competing products. As such, we do not know the degree of future protection that we will have on our proprietary products and technology.

Additionally, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Even if patents do successfully issue and even if such patents cover our drug candidates, other parties may initiate, for patents filed before March 16, 2013 (i.e., the enactment of the America Invents Act), interference or re-examination proceedings, for patents filed on or after March 16, 2013, post-grant review, *inter partes* review, nullification or derivation proceedings, in court or before patent offices, or similar proceedings challenging the validity, enforceability or scope of such patents, which may result in the patent claims being narrowed or invalidated. Successful defense of its patents can constitute a material factor in a company's expenses. According to an August 2017 article published by Bloomberg News (<https://www.bna.com/cost-patent-infringement-n73014463011/>), depending on the value at stake, the American Intellectual Property Law Association's "2017 Report of the Economic Survey" reported the average cost of a patent litigation in 2017 to be \$1.7 million.

In addition, the fact that the Company has exclusive rights to prevent others from using a patented invention does not necessarily mean that the Company itself will have the unrestricted right to use that invention. Other parties may obtain ownership or licenses to patents or other IP rights that cover the manufacture, use or sale of our current or future products (or elements thereof). This may enable such other parties to enforce their patents or IP rights against us, and may, as a result, affect the commercialization of our products or exploitation of our own technology. We endeavor to identify early patents and patent applications which may block development of a product or technology and minimize this risk by conducting prior art searches before and during the projects. However, relevant documents may be overlooked, yet-to-be published or missed, which may in turn impact on the freedom to commercialize the relevant asset. In such cases, we may not be in a position to develop or commercialize products or drug candidates unless we successfully pursue litigation to nullify or invalidate the other IP rights concerned, or enter into a license agreement with the IP right holder, if available on commercially reasonable terms.

If we are unable to obtain and maintain the appropriate scope for our patents, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be adversely affected.

We may not obtain sufficient claim scope in those patents to prevent another party from competing successfully with our drug and device candidates. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technology or drug and device candidates in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop or prevent us from stopping others from using or commercializing similar or identical technology and drug and device candidates, or limit the duration of the patent protection of our technology and drug and device candidates. Given the amount of time required for the development, testing and regulatory review of new drug and device candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing drug and device candidates similar or identical to ours.

Further, the issuance, scope, validity, enforceability and commercial value of our and our current or future licensors' or collaboration partners' patent rights are highly uncertain. Our and our licensors' pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products.

We may not be able to protect and enforce our IP rights throughout the world.

Our commercial success will depend, in part, on our ability to maintain IP protection for our drug candidates in which we seek to develop and commercialize. While we rely primarily upon a combination of patents, trademarks, trade secrets and other contractual obligations to protect the IP related to our brands, products and other proprietary technologies, these legal means may afford only limited protection.

Filing and prosecuting patents on drug candidates and defending the validity of the same (if challenged) in all countries throughout the world could be prohibitively expensive for us, and our IP rights in countries outside the Major Patent Jurisdictions can be less extensive than those in the Major Patent Jurisdictions. In addition, the laws of some countries in the rest of the world such as India do not protect IP rights to the same extent as laws in the Major Patent Jurisdictions. Consequently, we may not be able to prevent other parties from practicing our inventions in the rest of the world. Competitors may use our technology in jurisdictions where we have not or not yet obtained patent protection to develop their own drugs and further, may export otherwise infringing drugs to non-U.S. jurisdictions where we have patent protection.

Our, our licensors' or collaboration partners' patent applications cannot be enforced against other parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology. In addition, patents and other IP rights also will not protect our technology, drug candidates if another party, including our competitors, design around our protected technology, drug candidates without infringing, misappropriating or otherwise violating our patents or other IP rights.

Moreover, currently and as our R&D continues to progress, some of our patents and patent applications are or may be co-owned with another party. Some of our licenses already provide that future-developed technologies (and any resulting patents) will be co-owned with the licensors and other patents for technologies we may acquire or develop with other parties may also be jointly owned. If we are unable to obtain an exclusive license to any such co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other persons, including our competitors, and our competitors could market competing products and technology, and we will be unable to transfer or grant exclusive rights to potential purchasers or development partners of such co-owned technologies. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against other parties, and such cooperation may not be provided to us. Any of the foregoing could limit the revenue we might generate from our patents or patent applications and thus have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Because patent applications are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors or collaborators were or will be the first to file any patent application related to a drug or device candidate. Furthermore, in the United States, if patent applications of other parties have an effective filing date before March 16, 2013, an interference proceeding can be initiated by such other party to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If patent applications of other parties have an effective filing date on or after March 16, 2013, in the United States a derivation proceeding can be initiated by such other parties to determine whether our invention was derived from theirs.

Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing our invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. In addition, we may be subject to other challenges regarding our exclusive ownership of our IP. If another party were successful in challenging our exclusive ownership of any of our IP, we may lose our right to use such IP, such other party may be able to license such IP to other parties, including our competitors, and our competitors could market competing products and technology. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Many companies have encountered significant problems in protecting and defending IP rights in jurisdictions outside Major Patent Jurisdictions. The legal systems of some countries do not favor the enforcement of patents, trade secrets and other IP, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other IP rights, or the marketing of competing drugs in violation of our proprietary rights generally.

To date, we have not sought to enforce any issued patents in any jurisdictions. Proceedings to enforce our patent and other IP rights in any jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business.

Furthermore, such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke other parties to assert claims of infringement or misappropriation against us. We may not prevail in any lawsuits that we initiate in jurisdictions where opposition proceedings are available and the damages or other remedies awarded, if any, may not be commercially meaningful. The requirements for patentability may differ in certain countries, particularly developing countries. Certain countries in Europe, the PRC, and developing countries including India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to another party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our IP rights around the world may be inadequate to obtain a significant commercial advantage from the IP that we develop.

We may become involved in lawsuits to protect or enforce our IP, which could be expensive, time-consuming and unsuccessful. Our patent rights relating to our drug and device candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable non-U.S. authority.

Competitors may infringe our patent rights or misappropriate or otherwise violate our IP rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our IP rights, to protect our trade secrets or determine the validity and scope of our own IP rights or the proprietary rights of others. This can be expensive and time-consuming. Any claim that we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe their IP rights. Many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce and/or defend their IP rights than we can. Accordingly, despite our efforts, we may not be able to prevent other parties from infringing upon or misappropriating our IP. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that patent rights or other IP rights owned by us are invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patent rights or other IP rights do not cover the technology in question. An adverse result in any litigation proceeding could put our patent, as well as any patents that may issue in the future from our pending patent applications, at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with IP litigation, there is risk that some of our confidential information could be compromised by disclosure during this type of litigation.

If we initiate legal proceedings against another party to enforce our patent, or any patents that may be issued in the future from our patent applications, that relates to one of our drug and device candidates, the defendant could counterclaim that such patent rights are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which another party can assert invalidity or unenforceability of a patent. Parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include ex parte re-examination, *inter partes* review, post-grant review, derivation and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our drug and device candidates. With respect to the validity of our patents, for example, there may be invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our drug and device candidates. Such a loss of patent protection could have a material adverse impact on our business.

We may not be able to prevent misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States. Furthermore, because of the substantial amount of discovery required in connection with IP litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

We may be subject to claims challenging the inventorship of our patents and other IP.

Although we are not currently experiencing any claims challenging the inventorship of our patents or ownership of our IP, we may in the future be subject to claims that former employees, collaborators or other parties have an interest in our patents or other IP as inventors or co-inventors. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our drug and device candidates and who have not clearly contracted to transfer or assign any rights they may have to the Company. In addition, for our licensed patents, although a majority of our licensors have procured assignment forms and records from inventors to affirm their ownership in the licensed IP, another party or former employee or collaborator of our licensors not named in the patents may challenge the inventorship of claim an ownership interest in one or more of our or our licensors' patents. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose rights such as exclusive ownership of, or right to use, our patent rights or other IP. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

If we are sued for infringing IP rights of other parties, such litigation could be costly and time-consuming and could prevent or delay us from developing or commercializing our drug candidates, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends in part on our avoiding infringement of the patents and other IP rights of other parties. There is a substantial amount of litigation involving patent and other IP rights in the biotechnology and pharmaceutical industries. Numerous issued patents, provisional patents and pending patent applications, which are owned by other parties, exist in the fields in which we are developing drug candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our drug candidates may give rise to claims of infringement of the patent rights of others.

Other parties may assert that we are employing their proprietary technology without authorization. There may be other patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our drug candidates. Because patent applications can take many years to issue, there may be currently pending patent applications or provisional patents which may later result in issued patents that our drug candidates may infringe. In addition, other parties may obtain patents in the future and claim that use of our technology infringes upon these patents. If any other patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our drug candidates, any molecules formed during the manufacturing process or any final drug itself, the holders of any such patents may be able to prevent us from commercializing such drug candidate unless we obtain a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. Similarly, if any other patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy or patient selection methods, the holders of any such patent may be able to block our ability to develop and commercialize the applicable drug candidate unless we obtain a license, limit our uses, or until such patent expires, or is finally determined to be held invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all.

Other parties who bring successful claims against us for infringement of their IP rights may obtain injunctive or other equitable relief, which could prevent us from developing and commercializing one or more of our drug candidates. Defense of these claims, regardless of their merits, would involve substantial litigation expense and be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement or misappropriation against us, we may have to pay substantial damages, including treble damages and attorneys' fees in the case of willful infringement, obtain one or more licenses from other parties, pay royalties or redesign our infringing drug candidates, which may be impossible or require substantial time and monetary expenditure. In the event of an adverse result in any such litigation, or even in the absence of litigation, we may need to obtain licenses from other parties to advance our research or allow commercialization of our drug candidates. Any required license may not be available at all, or may not be available on commercially reasonable terms. In the event that we are unable to obtain such a license, we would be unable to further develop and commercialize one or more of our drug candidates, which could harm our business significantly. We may also elect to enter into license agreements in order to settle patent infringement claims or resolve disputes prior to litigation, and any such license agreements may require us to pay royalties and other fees that could significantly reduce our profitability for any product related to that patent and thus harm our business.

Even if resolved in our favor, litigation or other legal proceedings relating to IP claims may cause us to incur significant expenses, and could distract our technical personnel, management personnel, or both from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the market price of our Class A Ordinary Shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

There may be patent applications pending of which we are not aware, but which cover similar products to the ones we are attempting to license or develop, which may result in lost time and money, as well as litigation.

It is possible that we have failed to identify relevant outstanding patents or applications. For example, U.S. applications filed before November 29, 2000 and certain U.S. applications filed after that date that will not be filed outside the United States remain confidential until patents are issued. Patent applications filed in the United States after November 29, 2000 and generally filed elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our products could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our products or the use of our products. Holders of any such unanticipated patents or patent applications may actively bring infringement claims against us, with the same potential litigation consequences as alluded to elsewhere in this registration statement, of which this prospectus forms a part. Any of these events could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and other patent agencies in several stages over the lifetime of the patent. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Although an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly submit documents requesting an extension of time. In any such event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

The terms of our patents may not be sufficient to effectively protect our drug and device candidates and business.

In most countries in which we file, including the United States, the term of an issued patent is generally 20 years from the earliest claimed filing date of a non-provisional patent application in the applicable country. Although various extensions may be available, the life of a patent and the protection it affords is limited. For example, depending upon the timing, duration and specifics of the FDA regulatory approval for our drug candidates, one or more of our U.S. patents, if issued, might be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent term extension of up to five years as compensation for patent term lost during drug development and the FDA regulatory review process. Patent term extensions, however, cannot extend the remaining term of a patent beyond a total of 14 years from the date of drug approval by the FDA, and only one patent can be extended for a particular drug. The application for patent term extension is subject to approval by the USPTO, in conjunction with the FDA. We may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain a patent term extension for a given patent or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our drug will be that of the originally issued patents themselves.

Even if patents covering one of our drug candidates are obtained, thereby giving us a period of exclusivity for manufacturing and marketing that drug, we will not be able to assert such patent rights upon the expiration of the issued patents against potential competitors who may begin marketing generic copies of our medications, and our business and results of operations may be adversely affected.

Changes in patent law in the United States could diminish the value of patents in general, thereby impairing our ability to protect our drug and device candidates.

The United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained, if any. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents in the United States could change in unpredictable ways that would weaken our ability to obtain new patents, or to enforce our existing patents and patents that we might obtain in the future. For example, in a recent case, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, the U.S. Supreme Court held that certain claims to naturally-occurring substances are not patentable. Although we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patent rights. There could be similar changes in the laws of foreign jurisdictions that may impact the value of our patent rights or our other IP rights.

In addition, recent patent reform legislation in the U.S., including the Leahy-Smith America Invents Act, or the America Invents Act, could increase those uncertainties and costs. The America Invents Act was signed into law on September 16, 2011, and many of the substantive changes became effective on March 16, 2013. The America Invents Act reforms U.S. patent law in part by changing the U.S. patent system from a “first to invent” system to a “first inventor to file” system, expanding the definition of prior art, and developing a post-grant review system, thus changing the U.S. patent law in a way that may weaken our ability to obtain patent protection in the U.S. for those applications filed after March 16, 2013. Further, the America Invents Act created new procedures to challenge the validity of issued patents in the U.S., including post-grant review and *inter partes* review proceedings, which some other parties have been using to cause the cancellation of selected or all claims of issued patents of competitors. For a patent with an effective filing date of March 16, 2013 or later, a petition for post-grant review can be filed by another party in a nine-month window from issuance of the patent. A petition for *inter partes* review can be filed immediately following the issuance of a patent if the patent has an effective filing date prior to March 16, 2013. A petition for *inter partes* review can be filed after the nine-month-period for filing a post-grant review petition has expired for a patent with an effective filing date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of invalidity, whereas *inter partes* review proceedings can only raise an invalidity challenge based on published prior art and patents. These adversarial actions at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower burden of proof than used in litigation in U.S. federal courts. Therefore, it is generally considered easier for a competitor or other party to have a U.S. patent invalidated in a USPTO post-grant review or *inter partes* review proceeding than invalidated in a litigation in a U.S. federal court. If any of our patents are challenged by another party in such a USPTO proceeding, there is no guarantee that we or our licensors or collaborators will be successful in defending the patent, which would result in our loss of the challenged patent right.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to our issued patents, provisional patent, and pending patent applications, we expect to rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position and protect our drug and device candidates. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties that have access to them, such as our employees, corporate collaborators, outside scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. However, any of these parties may breach such agreements and disclose our proprietary information, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. If trade secrets which are material to our business were to be obtained by a competitor, our competitive position would be harmed.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed IP, including trade secrets or other proprietary information, of any such employee's former employer. In addition, while we typically require our employees, consultants and contractors who may be involved in the development of IP to execute agreements assigning such IP to us, we may be unsuccessful in executing such an agreement with each party who in fact develops IP that we regard as our own, which may result in claims by or against us related to the ownership of such IP. We are not aware of any threatened or pending claims that any of our projects involve misappropriated IP or other proprietary information, but in the future litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable IP rights. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

We may be unable to execute on the optimal development plan for one or more of our existing product candidates if we are unable to obtain or maintain necessary rights for some aspect of the developing technology through acquisitions or licenses.

Our existing programs currently use or may in the future use additional technologies subject to proprietary rights held by others, such as particular compositions or methods of manufacture, treatment or use. The licensing and acquisition of IP rights is a competitive area, and more established companies may pursue strategies to license or acquire such IP rights that we may consider necessary or useful. These established companies may have a competitive advantage over us due to their size, cash resources and greater capabilities in clinical development and commercialization.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire IP rights on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain or maintain licenses or other rights from other parties to use IP of those parties, our business, financial condition and prospects for growth could suffer.

If we fail to comply with our obligations in the agreements under which we license IP rights from other parties or otherwise experience disruptions to our business relationships with our licensors, we could be required to pay monetary damages or could lose license rights that are important to our business.

Many of our projects (including our Lead Projects) are based on IP which we have licensed from other parties. (See “Our Business – Intellectual Property”) Certain of these license agreements impose diligence, development or commercialization obligations on us, such as obligations to pay royalties on net product sales of our drug and device candidates once commercialized by us, to pay a percentage of sublicensing revenues if the licensed product is sublicensed, to make other specified milestone and/or annual payments relating to our drug candidates or to pay license maintenance and other fees, as well as obligations to pursue commercialization with due diligence. Specifically, a number of our license agreements also require us to meet development timelines in order to maintain the related license(s). In spite of our efforts, our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore seek to terminate the license agreements. If one of our licensors, despite our efforts, were to be successful in terminating its agreement with us, we would not be able to continue to develop, manufacture or market any drug candidate under that license agreements, and we could face claims for monetary damages or other penalties under that agreement. Such an occurrence would diminish or eliminate the value of that project to our Company, even if we are able to negotiate new or reinstated agreements, which may have less favorable terms. Depending on the importance of the IP and the related project, any such development could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, the agreements under which we currently license intellectual property or technology from other parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which (depending on the importance of the IP and the related project) could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangement for a project on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected drug or device candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

We may not have complete control of the preparation, filing and prosecution of patent applications, or to maintain patents, licensed by us from other parties.

The Company has in-licensed, and may in the future in-license patents owned or controlled by others for our use as part of our development plans. We also may out-license or sublicense patents which we own or control in collaborations with others for development and commercialization of our products. In either case, the continuing right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology under development is a matter for negotiation and we may not always be the party that obtains such control, in which case we will be reliant on our licensors, collaboration partners or sublicensees for determining strategies with respect to those patents. For our existing licenses, while we have an understanding with most of the licensors who maintain control over patent prosecution and we have jointly appointed and engaged patent agents nominated by us under one or more of our licenses, we cannot guarantee that such licensors or collaborators will always accept prosecution strategies proposed by us and/or our patent agents. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If our current or future licensors or collaboration partners fail to establish, maintain or protect such patents and other IP rights, such rights may be reduced or eliminated. If our licensors or joint development partners are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised.

Risks Related to Our Reliance on Unrelated Parties

We rely on unrelated parties to conduct discovery and further improvement of our innovations and licensed technologies, as well as our preclinical studies and clinical trials. If these unrelated parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our drug candidates, and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon CROs and collaborating institutions to monitor and manage data for our ongoing preclinical studies and programs. We rely on these parties for execution of preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, and regulatory requirements and scientific standards, and our reliance on the CROs and collaborating institutions does not relieve us of our regulatory responsibilities. If CROs, collaborating institutions or clinical investigators do not successfully carry out their contractual duties or obligations or meet expected deadlines, development of our product candidates could be delayed and our business could be adversely affected.

In addition, our CROs and collaborating institutions, are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and waste. In the event of contamination or injury resulting from our use of hazardous materials, we might be held liable for any resulting damages, and any liability could exceed our resources. We could also be subject to civil or criminal fines and penalties, and significant associated costs.

If the Company obtains approval of an IND for one of our drug candidates and moves into human clinical trials requiring significantly larger quantities of the candidate to be tested, we expect to rely on unrelated parties to manufacture supplies of that candidate. If those unrelated parties fail to provide us with sufficient quantities of clinical supply on that candidate or fail to do so at acceptable quality levels or prices, or fail to maintain required cGMP licenses, we may not be able to manufacture that candidate in sufficient quantities to conduct the necessary human trials. Should the failure by the CRO occur in anticipation of or after marketing approval of that candidate, we may be unable to generate as much revenue as rapidly (and such revenue may not be as profitable) as we had anticipated.

The manufacture of many drug products, particularly in commercial quantities, can be complex and may require significant expertise and capital investment, particularly if the development of advanced manufacturing techniques and process controls are required. If we obtain approval of an IND for any of our drug candidates, of which there can be no assurance, we intend to contract with outside contractors to manufacture clinical supplies and process our drug candidates. We have not yet had our drug candidates to be manufactured or processed on a commercial scale and may not be able to do so for any of our drug candidates.

As we expect to engage contract manufacturers, the Company will be exposed to the following risks:

- we might be unable to identify manufacturers on acceptable terms or at all because the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities must approve any manufacturers we determine to use and any potential manufacturer may be unable to satisfy federal, state or international regulatory standards;
- although we would be choosing manufacturers with the type of experience most suitable for our drug candidates, it is possible that our contract manufacturers may not be able to execute unique manufacturing procedures and other logistical support requirements we have developed and they might require a significant amount of support from us to implement and maintain the infrastructure and processes required to manufacture our particular drug candidates;
- our contract manufacturers might be unable to reproduce the quantity and quality of the drugs we need to meet our clinical and commercial needs within the time frames when we require those drugs;
- our contract manufacturers may breach their contracts with us, including by not performing as agreed or not devoting sufficient resources to our drug candidates, or they may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products;
- even if initially accepted by regulatory authorities, a manufacturer remains subject to ongoing periodic unannounced inspection by regulatory authorities to ensure strict compliance with cGMP and other government regulations, and our contract manufacturers may fail to comply with these regulations and requirements, resulting in rescission of cGMP licenses and our inability to continue using their services, requiring us to find a replacement manufacturer;
- depending on the terms of our agreement with a manufacturer, we may not own, or may have to share, the IP rights to any improvements made by the manufacturer in the manufacturing process for our drug candidates; and
- our contract manufacturers may have unacceptable or inconsistent product quality success rates and yields.

Each of these risks could delay or prevent the completion of our clinical trials or the approval of any of our drug candidates by the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities, result in higher costs or adversely impact commercialization of our drug candidates.

We are also responsible for quality control by our manufacturers. We intend to rely on those unrelated-party manufactures to perform certain quality assurance tests on our drug candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm and the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities could place significant restrictions on our Company until deficiencies are remedied.

Manufacturers of drug products often encounter difficulties in production, particularly in scaling up or out, validating the production process, and assuring high reliability of the manufacturing process (including the absence of contamination). These problems include logistics and shipping, difficulties with production costs and yields, quality control, including stability of the product, product testing, operator error, availability of qualified personnel, as well as compliance with strictly enforced federal, state and non-U.S. regulations. Furthermore, if contaminants are discovered in our supply of our drug candidates or in the manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. It is possible that stability failures or other issues relating to the manufacture of our drug candidates may occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints, or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide our drug candidate to patients in clinical trials would be jeopardized. Any delay or interruption in the manufacturing of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to begin new clinical trials with additional costs or terminate clinical trials completely.

Review of changes in the manufacturing process of our drug candidates could cause delays resulting from the need for additional regulatory approvals.

Changes in a process or procedure for manufacturing one of our drug candidates, including a change in the location where the drug candidate is manufactured or a change of a contract manufacturer, could require prior review by the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities and approval of the manufacturing process and procedures in accordance with the FDA, NMPA, EMA, or Health Canada's regulations, or comparable requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. The new facility will also be subject to pre-approval inspection. In addition, we would have to demonstrate that the product made at the new facility is equivalent to the product made at the former facility by physical and chemical methods, which are costly and time-consuming. It is also possible that the FDA, NMPA, EMA, Health Canada or other comparable regulatory authorities may require clinical testing as a way to prove equivalency, which would result in additional costs and delay.

Risks Related to AML Clinic

Failure to comply with all laws and regulations applicable to the business of AML Clinic could have a material, adverse impact on the Company's business.

Operation of AML Clinic subjects the Company to a variety of Hong Kong laws and regulations specific to companies and professionals in the business of delivering medical care. We and our employees will be subject to licensing and professional qualifications that do not apply to our other businesses. Breach of any of these laws, regulations or licensing requirements could subject the Company to significant fines and other penalties and possibly damage the Company's reputation, which could have a material adverse effect on the Company's business.

Risks Related to Our Natural Supplements

We may be subject to government regulations for natural supplements

From a regulatory perspective, some of the Company's non-drug candidates (including those developed under the project company Nativus), may be regulated as dietary supplements, including NativusWell® (NLS-2). For those non-drug candidates that the Company plans to develop, they are subject to extensive and rigorous domestic government regulation, including regulation by the FDA, the Centers for Medicare & Medicaid Services, or CMS, other divisions of the U.S. Department of Health and Human Services, state and local governments and their respective foreign equivalents. The FDA regulates dietary supplements, cosmetics and drugs under different regulatory schemes.

For example, the FDA regulates the processing, formulation, safety, manufacturing, packaging, labeling, advertising and distribution of dietary supplements and cosmetics under its dietary supplement and cosmetic authority, respectively. The FDA also regulates the research, development, pre-clinical and clinical testing, manufacture, safety, effectiveness, record keeping, reporting, labeling, storage, approval, advertising, promotion, sale, distribution, import and export of pharmaceutical products under various regulatory provisions. If any drug products we develop are tested or marketed abroad, they will also be subject to extensive regulation by foreign governments, whether or not we have obtained FDA approval for a given product and its uses. Such foreign regulation may be equally or more demanding than corresponding U.S. regulation.

Government regulation substantially increases the cost and risk of researching, developing, manufacturing and selling products. Our failure to comply with these regulations could result in, by way of example, significant fines, criminal and civil liability, product seizures, recalls, withdrawals, withdrawals of approvals and exclusion and debarment from government programs. Any of these actions, including the inability of our hormone therapy drug candidates to obtain and maintain regulatory approval, would have a materially adverse effect on our business, financial condition, results of operations and prospects.

In addition, the FDA’s policies may change and additional government regulations may be issued that could prevent, limit, or delay regulatory approval of our drug candidates, or impose more stringent product labeling and post-marketing testing and other requirements.

We intend to first launch and market NativusWell® (NLS-2) in Hong Kong. In Hong Kong, natural supplements are defined as “health food” products. “Health food” containing medicines are subject to the Pharmacy and Poisons Ordinance (Cap 138) and such “health food” containing Chinese medicines are regulated by the Chinese Medicine Ordinance (Cap 549), where they must meet the requirements in respect of safety, quality and efficacy before they can be registered.

For other “health food” products which cannot be classified as Chinese medicine or western medicine are regulated under the Public Health and Municipal Services Ordinance (Cap 132) as general food products. The Public Health and Municipal Services Ordinance requires the manufacturers and sellers of food to ensure that their products are fit for human consumption and comply with the requirements in respect of food safety, food standards and labelling. In addition, all prepackaged food should bear labels which correctly list out the ingredients of the food under the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) under the Ordinance.

The NativusWell® (NLS-2) is made with the bioactive ingredient extracted Chinese yam powder and does not contain any western or Chinese medicine; therefore, registration is not required under the local laws for marketing in Hong Kong. We will, however, ensure the compliance of the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) with by proper labelling in place.

Risks Related to Our Device Candidates

We are subject to risks related to obtaining regulatory approval for device candidates.

The Company’s device candidates (including those being developed under SLS-1), are likely to be regulated as medical devices. Medical devices are subject to extensive regulations, supervised by regulatory authorities around the world, including the FDA, NMPA and applicable national authorities in relevant European countries. The regulatory framework related to medical devices covers research, development, design, manufacturing, safety, reporting, testing, labeling, packaging, storage, installation, servicing, marketing, sales and distribution. The Company is and may also be, in addition to these industry-specific regulations, subject to numerous other ongoing regulatory obligations, such as data protection, environmental, health and safety laws and restrictions. The costs of compliance with applicable regulations, requirements or guidelines could be substantial. Furthermore, the regulatory environment has generally become more stringent and extensive over time. Failure to comply with these regulations could result in sanctions including fines, injunctions, civil penalties, denial of applications for marketing approval of the Company’s products, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions, partial suspension or total shutdown of production and criminal prosecutions, any of which could significantly increase the Company’s costs, delay the development and commercialization of its device candidates.

We are subject to risks related to the carrying out and outcome of clinical trials of medical devices.

The Company may sponsor studies on human participants in clinical studies of its device candidates. Such clinical studies are performed to support regulatory approvals for market access or to generate evidence relating to clinical benefits and cost benefits of using such device candidates. Clinical studies are costly and time consuming and associated with risks such as finding trial sites, recruitment of suitable patients, the actual cost per patient exceeding budget and inadequacies in the execution of the trials. There is also a risk of delays in the performance of clinical studies, which can occur for a variety of reasons. For example, delays in obtaining regulatory approval to commence a trial, reaching agreements on acceptable terms with prospective contract research organizations (“CROs”) and clinical investigational sites, obtaining institutional review board approval at each site, difficulties in patient enrolment, patients failing to complete a trial or return for follow-up, adding new sites or obtaining sufficient supplies of products or clinical sites dropping out of a trial. If delays persist, there is a risk that studies eventually are suspended or terminated if the delays occur due to circumstances that a sponsor of a clinical trial has difficulties controlling, or is unable to control, or if the measures required for conducting the studies further are deemed too costly or extensive in relation to the scopes and goals of the studies.

There are many factors which may affect patient enrollment. Amongst these are the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical study and competing clinical studies. Furthermore, clinicians' and patients' perceptions as to the potential advantages of the product being studied in relation to other available therapies, including any new products that may be approved for the indications the company is investigating. Clinical studies may also be suspended or terminated if participating subjects are exposed to unacceptable health risks or undesired side-effects.

Furthermore, there is a risk that clinical studies may not demonstrate the required clinical benefit for the prospective indication the trial is aimed at. Failure in premarketing clinical studies could lead to market clearance or approvals not being obtained which could delay or jeopardize the Company's ability to develop, market and sell the device candidates being studied. At any stage of the development, the Company may discontinue device candidate based on review of available preclinical and clinical data, the estimated costs of continued development, market considerations and other factors. Furthermore, with respect to the clinical studies of device candidates conducted by CROs and others, the Company may have less control over their timing or outcome.

Risks Related to Our Industry, Business and Operation

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research, development and clinic operations involve the use of hazardous materials, chemicals and various radioactive compounds/radiation and AML Clinic may create medical waste and radiation. Our R&D Center may maintain quantities of various flammable and toxic chemicals in our facilities that are required for our research, development and manufacturing activities. We are subject to local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials and of medical waste at the jurisdictions where we operate our clinic and research facilities, which are currently limited to Hong Kong. We believe our procedures for storing, handling and disposing of these materials comply with the relevant guidelines and laws of the jurisdictions in which our facilities are located. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials and medical waste.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties, if we violate any of these laws or regulations.

Our future success depends on our ability to retain our Chief Executive Officer, our scientific and clinical advisors, and other key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on Ian Huen, our Chief Executive Officer, as well as, other principal members of our management teams, scientific teams as well as scientific and clinical advisors. Although we have formal employment agreements, which we refer to as appointment letters, with all of our executive officers, these agreements do not prevent our executives from terminating their employment with us at any time, subject to applicable notice periods. Nevertheless, the loss of the services of any of these persons could impede the achievement of our research, development and commercialization objectives.

To induce valuable employees to remain at our Company, in addition to salary and cash incentives, we plan to provide share incentive grants that vest over time. The value to employees of these equity grants that vest over time may be significantly affected by movements in the price of our Class A Ordinary Shares that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Although we have appointment letters with our key employees, any of our employees could resign at any time, with 1-month to 3-months prior written notice or with payment in lieu of notice.

Recruiting and retaining qualified officers, scientific, clinical, sales and marketing personnel or consultants will also be critical to our success. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our discovery and preclinical studies development and commercialization strategy. The loss of the services of our executive officers or other key employees and consultants could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

Furthermore, replacing executive officers and key employees or consultants may be difficult and may take an extended period of time, because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drug and device candidates. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel or consultants on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel.

We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We will need to increase the size and capabilities of our organization, and we may experience difficulties in managing our growth.

As of the date hereof, we have 39 employees, including 35 full-time employees and 4 part-time employees. Of these, 12 are engaged in full-time research and development and laboratory operations, 19 are engaged in full-time general and administrative functions, 4 are full-time employees engaged in the clinic operation and 4 part-time employees are engaged in sponsored research and development, clinic operations, finance, and legal clerical support. As of the date of hereof, 38 of our employees are located in Asia and 1 of our employees is located in Europe. In addition, we have engaged and may continue to engage 48 independent contracted consultants and advisors to assist us with our operations. As our development and commercialization plans and strategies develop, and as we have transitioned into operating as a public company, we will need to establish and maintain effective disclosure and financial controls and make changes in our corporate governance practices. We will need to add a significant number of additional managerial, operational, sales, marketing, financial and other personnel with the appropriate public company experience and technical knowledge and we may not successfully recruit and maintain such personnel. Future growth will impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including clinical, the FDA or other comparable regulatory authority review process for our drug and device candidates, while complying with our contractual obligations to contractors and others; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize our drug candidates will depend, in part, on our ability to effectively manage our future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants for significant input in selecting and evaluating new products to pursue. These independent organizations, advisors and consultants may not continue to be available to us on a timely basis when needed, and in such case, we may not have the ability to find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities, or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval of our drug candidates or otherwise advance our business. Furthermore, we may not be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, if at all.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our drug and device candidates and, accordingly, may not achieve our research, development and commercialization goals.

We intend to seek additional collaborations, strategic alliances or acquisitions or enter into royalty-seeking or sublicensing arrangements in the future, but we may not realize the benefits of these arrangements.

We intend to form or seek strategic alliances, create joint ventures or collaborations, acquire complimentary products, IP rights, technology or businesses or enter into additional licensing arrangements with unrelated parties that we determine may complement or augment our development and commercialization efforts with respect to our drug and device candidates. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing shareholders, or disrupt our management and business.

We will face significant competition in seeking appropriate strategic partners and the negotiation process is likely to be time-consuming, costly and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or another alternative arrangement for any of our drug and device candidates because their state of development may be deemed to be too early for collaborative effort and others may not view our drug and device candidates as having the requisite potential to demonstrate safety and efficacy. If and when we enter into an agreement with a collaboration partner or sublicensee for development and commercialization of a drug or device candidate, we can expect to relinquish some or all of the control over the future success of that drug and device candidate to the unrelated-party.

Further, even if we enter into a collaboration involving any of our drug and device candidates, the arrangement will be subject to numerous risks, which may include the following:

- the collaborators will likely have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- the collaborator may ultimately choose not pursue development and commercialization of our drug candidates or may elect not to continue or renew development or commercialization programs, based on clinical trial results, changes in their strategic focus due to the acquisition of competitive drugs, availability of funding, or other external factors, such as a business combination that diverts resources or creates competing priorities;
- the collaborator may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a drug or device candidate, repeat or conduct new clinical trials, or require a new formulation of a drug or device candidate for clinical testing;
- the collaborator could independently develop, or develop with unrelated parties, drugs that compete directly or indirectly with our drugs or drug and device candidates;
- the collaborator with marketing and distribution rights to one or more drugs may not commit sufficient resources to their marketing and distribution;

- the collaborator may not properly maintain or defend our IP rights or may use our IP or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our IP or proprietary information or expose us to potential liability;
- disputes may arise between us and the collaborator that cause the delay or termination of the research, development or commercialization of our drug and device candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- the collaboration may be terminated and, if terminated, may result the Company needing additional capital to pursue further development or commercialization of the applicable drug and device candidates;
- the collaborator may own or co-own IP covering our drugs that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such IP;
- the collaboration may result in increased operating expenses or the assumption of indebtedness or contingent liabilities; and
- the collaboration arrangement may result in the loss of key personnel and uncertainties in our ability to maintain key business relationships.

As a result, if we enter into collaboration agreements and strategic partnerships or license our drugs, we may not be able to realize the benefit of such transactions, which could delay our timelines or otherwise adversely affect our business. Following a strategic transaction or license, we may not achieve the revenue or specific net income that justifies such transaction. If we are unable to reach agreements with a suitable collaborator on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a drug or device candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense.

If we fail to enter into collaborations, we may seek to fund and undertake development or commercialization activities on our own, but we may not have sufficient funds or expertise to undertake the necessary development and commercialization activities. In such a case, we may not be able to further develop our drug and device candidates or bring them to market and generate product sales revenue, which would harm our business prospects, financial condition and results of operations.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to comply with the laws of the FDA and other similar non-U.S. regulatory authorities; provide true, complete and accurate information to the FDA and other similar non-U.S. regulatory authorities; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar non-U.S. fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain the FDA approval for any of our drug and device candidates and begin commercializing those drugs in the United States, our potential exposure under U.S. laws will increase significantly and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with principal investigators of our sponsored researches and research patients and our use of information obtained in the course of patient recruitment for clinical trials, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally.

It is not always possible to identify and deter misconduct by employees and other parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC.

We believe that any disclosure controls and procedures, or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our Class A Ordinary Shares. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

If we fail to establish and maintain proper internal financial reporting controls, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to file a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. The presence of material weaknesses in internal control over financial reporting could result in financial statement errors which, in turn, could lead to errors in our financial reports and/or delays in our financial reporting, which could require us to restate our operating results. In connection with the audit of our financial statements for the year ended December 31, 2018 and the period March 1, 2017 through December 31, 2017, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting, as defined in the standards established by the Public Company Accounting Oversight Board of the United States. The material weakness identified was the lack of dedicated resources to take responsibility for the finance and accounting functions and the preparation of financial statements in compliance with generally accepted accounting principles in the United States, or U.S. GAAP.

In 2019, we took actions to remediate the abovementioned material weakness, and we believe we have remediated the material weakness by implementing the following measures:

- provide trainings to staff regarding to the preparation of financial statements in compliance with generally accepted accounting principles in the United States;
- change to a new and well-established accounting system to enhance effectiveness and financial and system control;
- establish clear roles and responsibilities for accounting and financial reporting staff to address finance and accounting issues; and
- continue to monitor the improvement on internal control over financial reporting.

As of December 31, 2019, we determined that the aforementioned measures have remediated the material weakness. However, since we are still in the process of replenishing and building up a qualified finance and accounting team with sufficient dedicated resources, our management assessed that the deficiency related to the lack of dedicated resources to take responsibility for the finance and accounting functions and the preparation of financial statements in compliance with generally accepted accounting principles in the United States, or U.S. GAAP, still existed as of December 31, 2019. Therefore, based on the definition of “material weakness” and “significant deficiency” in the standards established by the Public Company Accounting Oversight Board of the United States, our management concluded that the deficiency now only rises to the level of a significant deficiency. However, we cannot assure you that we will not identify additional material weaknesses or significant deficiencies in the future.

Our management concluded that our internal controls over financial reporting were effective as of December 31, 2019. However, if we fail to maintain effective internal controls over financial reporting in the future, our management and our independent registered public accounting firm may conclude that our internal control over financial reporting is not effective. Investors may lose confidence in our operating results, the price of the Class A Ordinary Shares could decline and we may be subject to litigation or regulatory enforcement actions. In addition, if we are unable to meet the requirements of Section 404 of the Sarbanes-Oxley Act, the Class A Ordinary Shares may not be able to remain listed on the NASDAQ Global Market.

We may market our products, if approved, globally; if we do, we will be subject to the risk of doing business internationally.

We operate and expect to operate in various countries, and we may not be able to market our products in, or develop new products successfully for, these markets. We may also encounter other risks of doing business internationally including but not limited to:

- unexpected changes in, or impositions of, legislative or regulatory requirements;
- efforts to develop an international sales, marketing and distribution organization may increase our expenses, divert our management’s attention from the acquisition or development of drug candidates or cause us to forgo profitable licensing opportunities in these geographies;
- the occurrence of economic weakness, including inflation or political instability;
- the effects of applicable non-U.S. tax structures and potentially adverse tax consequences;
- differences in protection of our IP rights including patent rights of other parties;
- the burden of complying with a variety of foreign laws including difficulties in effective enforcement of contractual provisions;
- delays resulting from difficulty in obtaining export licenses, tariffs and other barriers and restrictions, potentially longer payment cycles, greater difficulty in accounts receivable collection and potentially adverse tax treatment; and
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad.

In addition, we are subject to general geopolitical risks in foreign countries where we operate, such as political and economic instability and changes in diplomatic and trade relationships, which could affect, among other things, customers’ inventory levels and consumer purchasing, which could cause our results to fluctuate and our net sales to decline. The occurrence of any one or more of these risks of doing business internationally, individually or in the aggregate, could materially and adversely affect our business and results of operations.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our shareholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

We may evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary products, IP rights, technology or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including, but not limited to:

- increase in operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, IP and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing drugs or drug and device candidates and regulatory approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business.

If we fail to comply with the U.S. Foreign Corrupt Practices Act ("FCPA"), or other anti-bribery laws, including the Bribery Act 2010 of the United Kingdom (UK Bribery Act"), our reputation may be harmed and we could be subject to penalties and significant expenses that have a material adverse effect on our business, financial condition and results of operations.

We are subject to the FCPA. The FCPA and UK Bribery Act generally prohibits us from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business or other benefits. We are also subject to the anti-bribery laws of other jurisdictions, particularly the PRC. As our business expands, the applicability of the FCPA and other anti-bribery laws to our operations will increase. Our procedures and controls to monitor anti-bribery compliance may fail to protect us from reckless or criminal acts committed by our employees or agents. If we, due to either our own deliberate or inadvertent acts or those of others, fail to comply with applicable anti-bribery laws, our reputation could be harmed and we could incur criminal or civil penalties, other sanctions and/or significant expenses, which could have a material adverse effect on our business, including our financial condition, results of operations, cash flows and prospects.

Our business and results of operations may be negatively impacted by the UK's withdrawal from the EU.

On June 23, 2016, the UK held a referendum in which a majority of voters approved an exit from the EU, or Brexit. After nearly three years of negotiation and political and economic uncertainty, the UK's withdrawal from the EU became effective on January 31, 2020. Under the terms of the withdrawal agreement, the UK and the EU will continue to negotiate the terms of trade and other matters during a transition period that will end on December 31, 2020.

During the Brexit transition period, the UK will continue to be subject to the laws and obligations applicable to all EU members, including laws related to trade and data privacy and the EU's pharmaceutical laws. However, future regulations that will apply in the UK following the transition period (including financial laws and regulations, tax and free trade agreements, intellectual property rights, data protection laws, supply chain logistics, environmental, health and safety laws and regulations medicine licensing and regulations, immigration laws and employment laws), have yet to be addressed. This lack of clarity on future UK laws and regulations and their interaction with the EU laws and regulations may negatively impact foreign direct investment in the UK, increase costs, depress economic activity and restrict access to capital. Brexit, including developments that occur during the Brexit transition period, may affect our results of operations in a number of ways, including increasing currency exchange risk, generating instability in the global financial markets or negatively impacting the economies of the UK and Europe. In addition, as we are headquartered in the UK, it is possible that Brexit may impact some or all of our current operations. For example, following the transition period, Brexit may impact our ability to freely move employees from our headquarters in the UK to other locations in Europe. If the UK and the EU are unable to negotiate acceptable agreements or if other EU member states pursue withdrawal, barrier-free access between the UK and other EU member states or among the EEA overall could be diminished or eliminated.

The long-term effects of Brexit will depend in part on any agreements the UK makes during the Brexit transition period to retain access to markets in the EU. Such a withdrawal from the EU is unprecedented, and it is unclear how the UK's access to the European single market for goods, capital, services and labor within the EU, or single market, and the wider commercial, legal and regulatory environment, will impact our current and future operations (including business activities conducted by third parties and contract manufacturers on our behalf).

We may also face new regulatory costs and challenges that could have an adverse effect on our operations as a result of Brexit. Depending on the terms of the UK's withdrawal from the EU, the UK could lose the benefits of global trade agreements negotiated by the EU on behalf of its member states, which may result in increased trade barriers that could make our doing business in the EU and the EEA more difficult. Since the regulatory framework in the UK covering quality, safety and efficacy of therapeutic substances, clinical trials, marketing authorization, commercial sales and distribution of therapeutic substances is derived from EU directives and regulations, Brexit could materially impact the future regulatory regime with respect to the approval of our drug candidates or any future therapeutic candidates, should we decide to seek marketing approvals for such candidates in the UK or to carry out any clinical trials in the UK for our drug candidates in support of marketing approvals by EMA in the future.

We expect that following the transition period, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replicate or replace, including those related to data privacy and the regulation of medicinal products, as described above. Any of these effects of Brexit, and others we cannot anticipate, could negatively impact our business and results of operations.

If we commence clinical trials of one of our drug or device candidates, and product liability lawsuits are brought against us, we may incur substantial liabilities and the commercialization of such drug or device candidates may be affected.

If any of our drug or device candidates enter clinical trials, we will face an inherent risk of product liability suits and will face an even greater risk if we obtain approval to commercialize any drugs. For example, we may be sued if our drug candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the drug, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our drug candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our drugs;
- injury to our reputation;

- withdrawal of clinical trial participants and inability to continue clinical trials;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any drug candidate; and
- a decline in the price of our Class A Ordinary Shares.

We shall seek to obtain the appropriate insurance once our candidates are ready for clinical trial. However, our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of drugs we develop, alone or with collaborators. We currently do not have in place product liability insurance and although we plan to have in place such insurance as and when the products are ready for commercialization, as well as insurance covering clinical trials, the amount of such insurance coverage may not be adequate, we may be unable to maintain such insurance, or we may not be able to obtain additional or replacement insurance at a reasonable cost, if at all. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Additionally, we may be sued if the products that we commercialize, market or sell cause or are perceived to cause injury or are found to be otherwise unsuitable, and may result in:

- decreased demand for those products;
- damage to our reputation;
- costs incurred related to product recalls;
- limiting our opportunities to enter into future commercial partnership; and
- a decline in the price of our Class A Ordinary Shares.

Our insurance coverage may be inadequate to protect us against losses.

We currently maintain property insurance for our office premises (including one unit of server and accessories). We hold employer's liability insurance generally covering death or work-related injury of employees; we maintain "Office Care Plan Insurance" for those persons working in our offices and "Medical Plan" for our employee. We hold public liability insurance covering certain incidents involving unrelated parties that occur on or in the premises of the Company. We do have directors and officers liability insurance. We do not have key-man life insurance on any of our senior management or key personnel, or business interruption insurance. Our insurance coverage may be insufficient to cover any claim for product liability, damage to our fixed assets or employee injuries. If any claims for damage are brought against us, or if we experience any business disruption, litigation or natural disaster, we might incur substantial costs and diversion of resources.

Fluctuations in exchange rates could result in foreign currency exchange losses

Our operations and equity are funded in U.S. dollars and we currently incur the majority of our expenses in U.S. dollars or in H.K. dollars. H.K. dollar is currently pegged to the U.S. dollar; however, we cannot guarantee that such peg will continue to be in place in the future. Our exposure to foreign exchange risk primarily relates to the limited cash denominated in currencies other than the functional currencies of each entity and limited revenue contracts dominated in H.K. dollars in certain Hong Kong operating entities. We do not believe that we currently have any significant direct foreign exchange risk and have not hedged exposures denominated in foreign currencies or any other derivative financial instruments.

If we are exposed to foreign currency exchange risk as our results of operations, cash flows maybe subject to fluctuations in foreign currency exchange rates. For example, if a significant portion of our clinical trial activities may be conducted outside of the United States, and associated costs may be incurred in the local currency of the country in which the trial is being conducted, which costs could be subject to fluctuations in currency exchange rates. We currently do not engage in hedging transactions to protect against uncertainty in future exchange rates between particular foreign currencies and the U.S. dollar. A decline in the value of the U.S. dollar against currencies in countries in which we conduct clinical trials could have a negative impact on our research and development costs. Foreign currency fluctuations are unpredictable and may adversely affect our financial condition, results of operations and cash flows.

Our investments are subject to risks that could result in losses.

We had unrestricted cash of \$4.02 million, \$5.19 million and \$12.01 million as of June 30, 2020, December 31, 2019 and December 31, 2018, respectively. We may invest our cash in a variety of financial instruments. All of these investments are subject to credit, liquidity, market and interest rate risk. Such risks, including the failure or severe financial distress of the financial institutions that hold our cash, cash equivalents and investments, may result in a loss of liquidity, impairment to our investments, realization of substantial future losses, or a complete loss of the investments in the long-term, which may have a material adverse effect on our business, results of operations, liquidity and financial condition. While we believe our cash position does not expose us to excessive risk, future investments may be subject to adverse changes in market value.

We are exposed to risks associated with our computer hardware, network security and data storage.

Similar to all other computer network users, our computer network system is vulnerable to attack of computer virus, worms, trojan horses, hackers or other similar computer network disruptive problems. Any failure in safeguarding our computer network system from these disruptive problems may cause breakdown of our computer network system and leakage of confidential information of the Company. Any failure in the protection of our computer network system from external threat may disrupt our operation and may damage our reputation for any breach of confidentiality to our customers, which in turn may adversely affect our business operation and performance. In the event that our confidential information is stolen and misused, we may become exposed to potential risks of losses from litigation and possible liability.

In addition, we are highly dependent on our IT infrastructure to store research data and information and manage our business operations. We do not backup all data on a real-time basis and the effectiveness of our business operations may be materially affected by any failure in our IT infrastructure. If our communications and IT systems do not function properly, or if there is any partial or complete failure of our systems, we could suffer financial losses, business disruption or damage to our reputation.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our research institution collaborators, CROs, suppliers and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, damage from computer viruses, material computer system failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions. In addition, we partially rely on our research institution collaborators for conducting research and development of our drug candidates, and they may be affected by government shutdowns or withdrawn funding. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on contract manufacturers to produce and process our drug candidates. Our ability to obtain clinical supplies of our drug candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption. A large portion of our contract manufacturer's operations is located in a single facility. Damage or extended periods of interruption to our corporate or our contract manufacturer's development or research facilities due to fire, natural disaster, power loss, communications failure, unauthorized entry or other events could cause us to cease or delay development of some or all of our drug candidates.

Although we do not currently conduct any business in the PRC, we may in the future; in doing so we would be exposed to various risks related to doing business in the PRC.

Although we currently do not conduct any business in the PRC, we are the exclusive licensee to certain PRC patents directed to our drug candidates, and we intend to file application for certain products in the PRC. The pharmaceutical industry in the PRC is subject to comprehensive government regulation and supervision, encompassing the approval, registration, manufacturing, packaging, licensing and marketing of new drugs. (See "Our Business – Regulation – PRC Regulations"). In recent years, the regulatory framework in the PRC regarding the pharmaceutical industry has undergone significant changes, and we expect that it will continue to undergo significant changes. Any such changes or amendments may result in increased compliance costs on our business or cause delays in or prevent the successful development or commercialization of our drug candidates in the PRC and reduce the current benefits that we believe are available to us from developing and manufacturing drugs in the PRC. Chinese authorities have become increasingly vigilant in enforcing laws in the pharmaceutical industry and any failure by us or our partners to maintain compliance with applicable laws and regulations or obtain and maintain required licenses and permits may result in the suspension or termination of our business activities in the PRC. We believe our strategy and approach is aligned with the PRC government's policies, but we cannot ensure that our strategy and approach will continue to be aligned.

If in the future, we commence business or operation in the PRC, changes in the political and economic policies of the PRC government may materially and adversely affect our business, financial condition and results of operations and may result in our inability to sustain our growth and expansion strategies. Once we start doing business in the PRC, our financial condition and results of operation in the PRC could be materially and adversely affected by government control over capital investments or changes in tax regulations that are applicable to us, and consequently have a material adverse effect on our businesses, financial condition and results of operations.

The SEC could take the position that we are an "investment company" subject to the extensive requirements of the Investment Company Act of 1940. Such a characterization and the associated compliance requirements could have a material adverse effect on our business, financial condition, and results of operations.

Our business had historically included passive healthcare related investments in early stage companies primarily in the United States. Although we are in the process of liquidating those securities that remain in our portfolio, we still hold some such investments and these are included as assets of our Company on a consolidated basis. As part of the Restructure, we resolved to exit such portfolio investments over an appropriate timeframe and focus our resources on our current business. Since the date of the Restructure, we have not held ourselves out as an investment company and we do not believe we are an "investment company" under the Investment Company Act of 1940. If the SEC or a court, however, were to disagree with us, we could be required to register as an investment company. This would subject us to disclosure and accounting rules geared toward investment companies, rather than operating companies, which may limit our ability to borrow money, issue options, issue multiple classes of stock and debt, and engage in transactions with affiliates, and may require us to undertake significant costs and expenses to meet the disclosure and regulatory requirements to which we would be subject as a registered investment company.

If we are classified as a passive foreign investment company for U.S. federal income tax purposes, United States holders of our Class A Ordinary Shares may be subject to adverse United States federal income tax consequences.

A non-U.S. corporation will be a passive foreign investment company ("PFIC") for U.S. federal income tax purposes, for such year, if either

- At least 75% of its gross income for such year is passive income; or
- The average percentage of our assets (determined at the end of each quarter) during such year which produce passive income or which are held for the production of passive income is at least 50%.

Passive income generally includes dividends, interests, rents and royalties (other than rents or royalties derived from the active conduct of a trade or business) and gains from the disposition of passive assets.

A separate determination must be made after the close of each taxable year as to whether a non-U.S. corporation is a PFIC for that year. For purposes of the PFIC analysis, in general, a non-U.S. corporation is deemed to own its pro rata share of the gross income and assets of any entity in which it is considered to own at least 25% of the equity by value. Based on the current and anticipated value of our assets, we believe we were a PFIC for U.S. federal income tax purposes for our taxable year ending December 31, 2018, and we may be a PFIC for U.S. federal income tax purposes for our current taxable year ending December 31, 2019.

In determining whether we are a PFIC, cash and investment are considered by the U.S. Internal Revenue Service ("IRS") to be a passive asset. During our taxable year ending December 31, 2019, we believe that the amount of restricted and unrestricted cash we had on hand and investments were greater than 50% of our total assets. The composition of our assets during the current taxable year may cause us to continue to be classified as a PFIC. The determination of whether we will be a PFIC for our current taxable year or a future year may depend in part upon how quickly we spend our liquid assets, and on the value of our goodwill and other unbooked intangibles not reflected on our balance sheet, which may depend upon the market value of our Class A Ordinary Shares from time to time. Further, while we will endeavor to use a classification methodology and valuation approach that is reasonable, the IRS may challenge our classification or valuation of our goodwill and other unbooked intangibles for purposes of determining whether we are a PFIC in the current or one or more future taxable years.

If we are a PFIC for any taxable year during which a U.S. Holder owns our Class A Ordinary Shares, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder. As discussed under "Taxation – Material U.S. Federal Income Tax Considerations for U.S. Holders – Passive Foreign Investment Company Rules", a U.S. Holder may be able to make certain tax elections that would lessen the adverse impact of PFIC status; however, in order to make such elections the U.S. holder will usually have to have been provided information about the company by us, and there is no assurance that the company will provide such information.

For a more detailed discussion of the application of the PFIC rules to us and the consequences to U.S. holders if we were determined to be a PFIC. (See "Taxation – Material U.S. Federal Income Tax Considerations for U.S. Holders – Passive Foreign Investment Company Rules")

Political risks associated with conducting business in Hong Kong.

While we operate our business globally, part of our business operations is based in Hong Kong. Accordingly, our business operation and financial conditions will be affected by the political and legal developments in Hong Kong. During the period covered by the financial information incorporated by reference into and included in this prospectus, we derive substantially all of our revenue from operations in Hong Kong and, specifically, from the AML Clinic in Hong Kong operating under the name of Talem Medical. Any adverse economic, social and/or political conditions, material social unrest, strike, riot, civil disturbance or disobedience, as well as significant natural disasters, may affect the market may adversely affect the business operations of the AML Clinic. Hong Kong is a special administrative region of the PRC and the basic policies of the PRC regarding Hong Kong are reflected in the Basic Law, namely, Hong Kong's constitutional document, which provides Hong Kong with a high degree of autonomy and executive, legislative and independent judicial powers, including that of final adjudication under the principle of "one country, two systems". However, there is no assurance that there will not be any changes in the economic, political and legal environment in Hong Kong in the future. Since a substantial part of our operations is based in Hong Kong, any change of such political arrangements may pose immediate threat to the stability of the economy in Hong Kong, thereby directly and adversely affecting our results of operations and financial positions.

The Hong Kong protests that begun in 2019 are ongoing protests in Hong Kong (the "Hong Kong Protests") triggered by the introduction of the Fugitive Offenders amendment bill by the Hong Kong government. If enacted, the bill would have allowed the extradition of criminal fugitives who are wanted in territories with which Hong Kong does not currently have extradition agreements, including mainland China. This led to concerns that the bill would subject Hong Kong residents and visitors to the jurisdiction and legal system of mainland China, thereby undermining the region's autonomy and people's civil liberties. Various sectors of the Hong Kong economy have been adversely affected as the protests turned increasingly violent. Most notably, the airline, retail, and real estate sectors have seen their sales decline.

Under the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, Hong Kong is exclusively in charge of its internal affairs and external relations, while the government of the PRC is responsible for its foreign affairs and defense. As a separate customs territory, Hong Kong maintains and develops relations with foreign states and regions. We cannot assure that the Hong Kong Protests will not affect Hong Kong's status as a Special Administrative Region of the People's Republic of China and thereby affecting its current relations with foreign states and regions.

Our revenue is susceptible to the ongoing Hong Kong Protests as well as any other incidents or factors which affect the stability of the social, economic and political conditions in Hong Kong. Any drastic events may adversely affect our business operations. Such adverse events may include changes in economic conditions and regulatory environment, social and/or political conditions, civil disturbance or disobedience, as well as significant natural disasters. Given the relatively small geographical size of Hong Kong, any of such incidents may have a widespread effect on our business operations, which could in turn adversely and materially affect our business, results of operations and financial condition.

We cannot assure that the Hong Kong Protests will end in the near future and that there will be no other political or social unrest in the near future or that there will not be other events that could lead to the disruption of the economic, political and social conditions in Hong Kong. If such events persist for a prolonged period of time or that the economic, political and social conditions in Hong Kong are to be disrupted, our overall business and results of operations may be adversely affected.

Furthermore, on June 30, 2020, the Standing Committee of the National People's Congress of the People's Republic of China passed the Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region (the "National Security Law"). In response to the implementation of the National Security Law, President Trump of the U.S. signed an executive order on Hong Kong Normalization on July 14, 2020 to end the preferential trading status of Hong Kong and, going forward, Hong Kong will receive the same treatment from the U.S. as China.

At the same time, the U.S. has imposed sanctions on and suspended collaborations with a number of Chinese companies and universities by including these entities in the Entity List and the Unverified List of the Bureau of Industry and Security of the U.S. Department of Commerce. Our Company has working relationships with universities in Hong Kong on R&D of some projects.

While none of our collaboration partners is currently under sanction by the U.S., it may cause significant disruptions if the universities' ability to conduct R&D is adversely affected due to difficulty in acquiring essential equipment and materials, as well as our business operations due to possible suspension of dealings with sanctioned entities.

To this date, the U.S. government has not imposed or threatened to impose any sanctions on the universities in Hong Kong. However, as U.S.-China relations continue to deteriorate, there is a possibility that sanctions could be imposed on the universities in Hong Kong in the future.

We are subject to the risks of doing business globally.

Our business is subject to risks associated with doing business globally. Accordingly, our business and financial results in the future could be adversely affected due to a variety of factors, including: changes in a specific country's or region's political and cultural climate or economic condition; unexpected changes in laws and regulatory requirements in local jurisdictions; difficulty of effective enforcement of contractual provisions in local jurisdictions; inadequate intellectual property protection in certain countries; enforcement of anti-corruption and anti-bribery laws; trade-protection measures, import or export licensing requirements and fines, penalties or suspension or revocation of export privileges; the effects of applicable local tax regimes and potentially adverse tax consequences; and significant adverse changes in local currency exchange rates.

Our results of operation may be negatively affected should the 2019-nCov virus (Coronavirus) continue to spread on a wider scale.

Our business could be adversely affected by the effects of a widespread outbreak of contagious disease, including the recent outbreak of respiratory illness caused by a novel coronavirus. Any outbreak of contagious diseases, and other adverse public health developments, particularly in China, could have a material and adverse effect on our business operations. These could include disruptions or restrictions on our ability to travel or to distribute our products, as well as temporary closures of our facilities or the facilities of our suppliers or customers.

The COVID-19 pandemic continues to rapidly evolve. The extent to which the outbreak impacts our business, preclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in various countries, business closures or business disruptions and the effectiveness of actions taken to contain and treat the disease. If we or any of the third parties with whom we engage were to experience shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively impacted.

In addition, the trading prices for our Class A Ordinary Shares and other biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic. As a result, we may face difficulties raising capital through sales of our securities or such sales may be on unfavorable terms.

The outbreak of the novel coronavirus disease, COVID-19, or other pandemic, epidemic or outbreak of an infectious disease may materially and adversely impact our preclinical studies and clinical trials.

As a result of the COVID-19 outbreak, or similar pandemics, we have and may in the future experience disruptions that could materially and adversely impact our manufacturing, preclinical development activities, preclinical studies and planned clinical trial. Potential disruptions include but are not limited to:

- delays or difficulties in enrolling patients in our clinical trials, should the relevant clinical trials be approved;
- delays or difficulties in initiating or expanding clinical trials, including delays or difficulties with clinical site initiation and recruiting clinical site investigators and clinical site staff;

- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19 or other health conditions or being forced to quarantine;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site data monitoring, due to limitations on travel imposed or recommended by governments, employers and others or interruption of clinical trial subject visits and study procedures, which may impact the integrity of subject data and clinical study endpoints;
- interruption or delays in the operations of the FDA or other regulatory authorities, which may impact review and approval timelines for regulatory submission and trial initiation;
- interruption or delays in our CROs and collaborators meeting expected deadlines or complying with regulatory requirements related to preclinical development activities, preclinical studies and planned clinical trials;
- delays or disruptions in preclinical experiments and investigational new drug application-enabling studies due to restrictions of on-site staff and unforeseen circumstances at contract research organizations and vendors;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- limitations on our ability to recruit and hire key personnel due to our inability to meet with candidates because of travel restrictions and “shelter in place” orders;
- limitations on employee resources that would otherwise be focused on the conduct of our preclinical studies and clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people; and
- interruption or delays to our sourced discovery and clinical activities.

Risks Related to Our Corporate Structure***Our CEO has control over key decision making as a result of his control of a majority of our voting shares.***

Our Founder, CEO, and our Executive Director, Mr. Ian Huen, and his affiliates, over which he is deemed to have control and/or have substantial influence, has voting rights with respect to an aggregate of 18,927,211 ordinary shares, on an as converted basis (2,865,742 Class A Ordinary Shares and 16,061,469 Class B Ordinary Shares), representing approximately 70% of the voting power of our outstanding ordinary shares as of the date hereof. As a result, Mr. Huen has the ability to control the outcome of matters submitted to our shareholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets. In addition, Mr. Huen has the ability to control the management and affairs of our company as a result of his position as our CEO and his ability to control the election of our directors. Additionally, in the event that Mr. Huen controls our company at the time of his death, control may be transferred to a person or entity that he designates as his successor. As a board member and officer, Mr. Huen owes a fiduciary duty to our shareholders and must act in good faith in a manner he reasonably believes to be in the best interests of our shareholders. As a shareholder, even a controlling shareholder, Mr. Huen is entitled to vote his shares, and shares over which he has voting control as a result of voting agreements, in his own interests, which may not always be in the interests of our shareholders generally.

The dual class structure of our ordinary shares has the effect of concentrating voting control with our CEO, directors and their affiliates.

Each Class B Ordinary Share has ten votes per share and each Class A Ordinary Share has one vote per share. Shareholders who hold shares of Class B Ordinary Shares, including our executive officers and their affiliates who hold such shares, hold approximately 96% of the voting power of our outstanding ordinary shares as of the date hereof. Because of the ten-to-one voting ratio between our Class B and Class A Ordinary Shares, the holders of our Class B Ordinary Shares collectively will continue to control a majority of the combined voting power of our ordinary share and therefore be able to control all matters submitted to our shareholders for approval so long as the shares of Class B Ordinary Shares represent at least 9.1% of all outstanding shares of our Class A Ordinary Shares and Class B Ordinary Shares. This concentrated control will limit your ability to influence corporate matters for the foreseeable future.

Future transfers by holders of Class B Ordinary Shares will generally result in those shares converting to Class A Ordinary Shares, subject to limited exceptions, such as certain transfers effected for estate planning purposes. The conversion of Class B Ordinary Shares to Class A Ordinary Shares will have the effect, over time, of increasing the relative voting power of those holders of Class B Ordinary Shares who retain their shares in the long term. If, for example, Mr. Huen retains a significant portion of his holdings of Class B Ordinary Share for an extended period of time, he could, in the future, continue to control a majority of the combined voting power of our Class A Ordinary Shares and Class B Ordinary Shares.

As a “controlled company” under the rules of the NASDAQ Global Market, we may choose to exempt our company from certain corporate governance requirements that could have an adverse effect on our public shareholders.

Our directors and officers beneficially own a majority of the voting power of our outstanding Class A Ordinary Shares. Under the Rule 4350(c) of the NASDAQ Global Market, a company of which more than 50% of the voting power is held by an individual, group or another company is a “controlled company” and may elect *not* to comply with certain corporate governance requirements, including the requirement that a majority of our directors be independent, as defined in the NASDAQ Global Market Rules, and the requirement that our compensation and nominating and corporate governance committees consist entirely of independent directors. Although we do not intend to rely on the “controlled company” exemption under the Nasdaq listing rules, we could elect to rely on this exemption in the future. If we elect to rely on the “controlled company” exemption, a majority of the members of our board of directors might not be independent directors and our nominating and corporate governance and compensation committees might not consist entirely of independent directors. Accordingly, during any time while we remain a controlled company relying on the exemption and during any transition period following a time when we are no longer a controlled company, you would not have the same protections afforded to shareholders of companies that are subject to all of the NASDAQ Global Market corporate governance requirements. Our status as a controlled company could cause our Class A Ordinary Share to look less attractive to certain investors or otherwise harm our trading price.

Risks Related to our Securities

Shares eligible for future sale may adversely affect the market price of our Class A Ordinary Shares if the shares are successfully listed on NASDAQ or other stock markets, as the future sale of a substantial amount of outstanding Class A Ordinary Shares in the public marketplace could reduce the price of our Class A Ordinary Shares.

The market price of our Class A Ordinary Shares could decline as a result of sales of substantial amounts of our Class A Ordinary Shares in the public market, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of our Class A Ordinary Shares. An aggregate of 8,491,526 Class A Ordinary Shares are outstanding as of the date of this prospectus. 4,312,941 of the Class A Ordinary Shares are freely transferable without restriction or further registration under the Securities Act. The remaining Class A Ordinary Shares will be “restricted securities” as defined in Rule 144. These Class A Ordinary Shares may be sold without registration under the Securities Act to the extent permitted by Rule 144 or other exemptions under the Securities Act.

A sale or perceived sale of a substantial number of our Ordinary Shares may cause the price of our Class A Ordinary Shares to decline.

If our shareholders sell substantial amounts of our Class A Ordinary Shares in the public market, the market price of our Class A Ordinary Shares could fall. Moreover, the perceived risk of this potential dilution could cause shareholders to attempt to sell their shares and investors to short our Class A Ordinary Shares. These sales also may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

Issuances by us of additional securities, could affect ownership and voting rights over us. In addition, the issuance of preferred shares, or options or warrants to purchase those preferred shares, could negatively impact the value of the Ordinary Shares as the result of preferential dividend rights, conversion rights, redemption rights and liquidation provisions granted to the stockholders of such preferred shares.

From time to time, we may issue in public or private sales additional securities to third party investors. Such securities may provide holders with ownership and voting rights that could provide the holders thereof with substantial influence over our business. Any preferred shares that may be issued shall have such rights, preferences, privileges and restrictions as may be designated from time-to-time by our board, including preferential dividend rights, voting rights, conversion rights, redemption rights and liquidation provisions. There cannot be any assurance that we will not issue preferred securities with rights and preferences that are more beneficial than those provided to our Ordinary Shares.

We have not paid dividends in the past and do not expect to pay dividends in the future, and any return on investment may be limited to the value of our shares.

We have never paid any cash dividends on our Class A Ordinary Shares and do not anticipate paying any cash dividends on our Class A Ordinary Shares in the foreseeable future, and any return on investment may be limited to the value of our Class A Ordinary Shares. We plan to retain any future earnings to finance growth.

Our dividend policy is subject to the discretion of our Board of Directors and will depend on, among other things, our earnings, financial condition, capital requirements and other factors. There is no assurance that our Board of Directors will declare dividends even if we are profitable. Under Cayman Islands law, dividends may be declared and paid only out of funds legally available therefor, namely out of either profit or our share premium account, and provided further that a dividend may not be paid if this would result in our Company being unable to pay its debts as they fall due in the ordinary course of business and the realizable value of assets of our Company will not be less than the sum of our total liabilities, other than deferred taxes as shown on our books of account, and our capital.

Our Class B Ordinary Shares have greater voting power than our Class A Ordinary Shares and certain existing shareholders have substantial influence over our Company and their interests may not be aligned with the interests of our other shareholders.

We have a dual-class voting structure consisting of Class A Ordinary Shares and Class B Ordinary Shares. Under this structure, holders of Class A Ordinary Shares are entitled to one vote per share, and holders of Class B Ordinary Shares are entitled to ten votes per share, which can cause the holders of Class B Ordinary Shares to have an unbalanced, higher concentration of voting power. Our management team as a group beneficially owns over 18 million Class B Ordinary Shares representing 80% voting power. As a result, until such time as their collective voting power is below 50%, our management team as a group of controlling shareholders have substantial influence over our business, including decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. They may take actions that are not in the best interests of us or our other shareholders. These corporate actions may be taken even if they are opposed by our other shareholders. Further, concentration of ownership of our Class B Ordinary Shares may discourage, prevent or delay the consummation of change of control transactions that shareholders may consider favorable, including transactions in which shareholders might otherwise receive a premium for their shares. Future issuances of Class B Ordinary Shares may also be dilutive to the holders of Class A Ordinary Shares. As a result, the market price of our Class A Ordinary Shares could be adversely affected.

Shareholders who hold shares of Class B Ordinary Shares, including our executive officers and their affiliates, hold approximately 96% of the voting power of our outstanding ordinary shares. Because of the ten-to-one voting ratio between our Class B and Class A Ordinary Shares, the holders of our Class B Ordinary Shares will collectively continue to control a majority of the combined voting power of our Ordinary Shares and therefore be able to control all matters submitted to our shareholders for approval, so long as the Class B Ordinary Shares represent at least 9.1% of all outstanding shares of our Ordinary Shares.

Raising additional capital may cause dilution to our shareholders, restrict our operations or require us to relinquish rights to our technology or drug and device candidates.

We may seek additional funding through a combination of equity offerings, debt financings, collaborations, licensing arrangements, strategic alliances and marketing or distribution arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a holder of our Class A Ordinary Shares. The incurrence of additional indebtedness or the issuance of certain equity securities could result in increased fixed payment obligations, and could also result in certain additional restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license IP rights and other operating restrictions that could adversely impact our ability to conduct our business. In addition, issuance of additional equity securities, or the possibility of such issuance, may cause the market price of our Class A Ordinary Shares to decline. In the event that we enter into collaborations or licensing arrangements to raise capital, we may be required to accept unfavorable terms, including relinquishing or licensing to another party on unfavorable terms our rights to technology or drug and device candidates that we otherwise would seek to develop or commercialize ourselves or potentially reserve for future potential arrangements when we might be able to achieve more favorable terms.

Since we are a Cayman Islands exempted company, the rights of our shareholders may be more limited than those of shareholders of a company organized in the United States.

Our corporate affairs are governed by our Second Amended and Restated Memorandum and Articles of Association (as may be amended from time to time) ("Memorandum and Articles"), the Companies Law (2018 Revision) of the Cayman Islands (the "Companies Law") and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary responsibilities of our directors are to a large extent governed by the common law of the Cayman Islands. This common law is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. Under the laws of some jurisdictions in the United States, majority and controlling shareholders generally have certain fiduciary responsibilities to the minority shareholders. Shareholder action must be taken in good faith, and actions by controlling shareholders which are obviously unreasonable may be declared null and void. Cayman Islands law protecting the interests of minority shareholders may not be as protective in all circumstances as the law protecting minority shareholders in some U.S. jurisdictions. In addition, the circumstances in which a shareholder of a Cayman Islands company may sue the company derivatively, and the procedures and defenses that may be available to the company, may result in the rights of shareholders of a Cayman Islands company being more limited than those of shareholders of a company organized in the United States. Accordingly, shareholders may have fewer alternatives available to them if they believe that corporate wrongdoing has occurred. The Cayman Islands courts are also unlikely to recognize or enforce judgments from U.S. courts based on certain liability provisions of U.S. securities laws that are penal in nature. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will generally recognize and enforce non-penal judgment of a foreign court of competent jurisdiction for a liquidated sum without retrial on its merits which is not obtained in a manner contrary to public policy in the Cayman Islands and in respect of which there are no concurrent proceedings in the Cayman Islands. This means, even if shareholders were to sue us successfully, they may not be able to recover anything to make up for the losses suffered.

Furthermore, our directors have the power to take certain actions without shareholder approval which would require shareholder approval under the laws of most U.S. jurisdictions. For example, the directors of a Cayman Islands company, without shareholder approval, may implement a sale of any assets, property, part of the business, or securities of the Company.

While Cayman Islands law allows a dissenting shareholder to express the shareholder's view that a court sanctioned reorganization of a Cayman Islands company would not provide fair value for the shareholder's shares, Cayman Islands statutory law does not specifically provide for shareholder appraisal rights on a merger or consolidation of a company. This may make it more difficult for you to assess the value of any consideration you may receive in a merger or consolidation or to require that the acquirer gives you additional consideration if you believe the consideration offered is insufficient. However, Cayman Islands' statutory law does provide a mechanism for a dissenting shareholder in a merger or consolidation to apply to the Grand Court for a determination of the fair value of the dissenter's shares, if it is not possible for the Company and the dissenter to agree a fair price within the time limits prescribed.

Shareholders of Cayman Islands exempted companies, such as our Company, have no general rights under Cayman Islands' law to inspect corporate records and accounts or to obtain copies of lists of shareholders. Our directors have discretion under our Memorandum and Articles to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

Lastly, under the law of the Cayman Islands, there is little statutory law for the protection of minority shareholders. The principal protection under statutory law is that shareholders may bring an action to enforce the constituent documents of the corporation, our Memorandum and Articles. Shareholders are entitled to have the affairs of the company conducted in accordance with the general law and the memorandum and articles of association.

There are common law rights for the protection of shareholders that may be invoked, largely dependent on English company law, since the common law of the Cayman Islands for business companies is limited. Under the general rule pursuant to English company law known as the rule in *Foss v. Harbottle*, a court will generally refuse to interfere with the management of a company at the insistence of a minority of its shareholders who express dissatisfaction with the conduct of the company's affairs by the majority or the board of directors. However, every shareholder is entitled to have the affairs of the company conducted properly according to law and the constituent documents of the company. As such, if those who control the company have persistently disregarded the requirements of company law or the provisions of the company's memorandum and articles of association, then the courts will grant relief. Generally, the areas in which the courts will intervene are the following: (1) an act complained of which is outside the scope of the authorized business or is illegal or not capable of ratification by the majority; (2) acts that constitute fraud on the minority where the wrongdoers control the company; (3) acts that infringe on the personal rights of the shareholders, such as the right to vote; and (4) where the company has not complied with provisions requiring approval of a special or extraordinary majority of shareholders, which are more limited than the rights afforded minority shareholders under the laws of many states in the United States subject to limited exceptions, under Cayman Islands Law a minority shareholder may not bring a derivative action against directors. Our Cayman Islands' counsel has advised us that they are aware of one recent as yet unreported derivative action having been brought in a Cayman Islands' court. Class actions are not recognized in the Cayman Islands, but groups of shareholders with identical interests may bring representative proceedings, which are similar.

As a result, you may be limited in your ability to protect your interests if you are harmed in a manner that would otherwise enable you to sue in a United States federal court. In addition, shareholders of Cayman Islands companies may not have standing to initiate a shareholder derivative action in U.S. federal courts.

As a result of all of the above, shareholders of our Company may have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would have as shareholders of a public U.S. company.

You may face difficulties in protecting your interests, and your ability to protect your rights through the U.S. federal courts may be limited because we are incorporated under Cayman Islands law, we currently conduct substantially all of our operations outside the United States and some of our directors and executive officers reside outside the United States.

We are incorporated in the Cayman Islands and currently conduct substantially all of our operations outside the United States through our subsidiaries. Some of our directors and executive officers reside outside the United States and a substantial portion of their assets are located outside of the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the Cayman Islands or in Hong Kong or the United Kingdom, in the event that you believe that your rights have been infringed under the securities laws of the United States or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands, the United Kingdom and Hong Kong may render you unable to enforce a judgment against our assets or the assets of our directors and officers. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, the United Kingdom or Hong Kong, although the courts of the Cayman Islands will generally recognize and enforce a non-penal judgment of a foreign court of competent jurisdiction without retrial on the merits if such judgment is final, for a liquidated sum, not in the nature of taxes, a fine or penalty, is not inconsistent with a Cayman Islands' judgment in respect of the same matters, and was not obtained in a manner which is contrary to public policy. In addition, a Cayman Islands court may stay proceedings if concurrent proceedings are being brought elsewhere.

As a foreign private issuer, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the NASDAQ Global Market corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with corporate governance listing standards.

As a foreign private issuer, we are permitted to take advantage of certain provisions in the NASDAQ Global Market listing rules that allow us to follow Cayman Islands law for certain governance matters. Certain corporate governance practices in the Cayman Islands may differ significantly from corporate governance listing standards as, except for general fiduciary duties and duties of care, Cayman Islands law has no corporate governance regime which prescribes specific corporate governance standards. We may follow Cayman Islands corporate governance practices in lieu of the corporate governance requirements of the Nasdaq Global Market in respect of the following. For instance, Cayman law does not require that we obtain shareholder approval to issue 20% or more of our outstanding Ordinary Shares in a private offering and we are not required to make our interim results available to shareholders, although as a NASDAQ listed company we do publicly file interim results for the first six months of our fiscal year. Therefore, our shareholders may be afforded less protection than they otherwise would have under corporate governance listing standards applicable to U.S. domestic issuers.

We are an emerging growth company within the meaning of the Securities Act and will take advantage of certain reduced reporting requirements.

We are an "emerging growth company," as defined in the JOBS Act and take advantage of certain exemptions from various requirements applicable to other public companies that are not emerging growth companies including, most significantly, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act for so long as we are an emerging growth company. As a result, if we elect not to comply with such auditor attestation requirements, our investors may not have access to certain information they may deem important.

The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. The Company has elected to use the extended transition period for complying with new or revised accounting standard under Section 102(b)(2) of the Jobs Act, that allows the Company to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies.

Risks Related to the Offering

We will have broad discretion in how we use the proceeds, and we may use the proceeds in ways in which you and other shareholders may disagree.

Our management will use its discretion to direct the use of the net proceeds from this offering. We intend to use the net proceeds from this offering to fund research and development of our lead product candidates, including clinical trial activities, as well as for working capital. Our management's judgments may not result in positive returns on your investment and you will not have the opportunity to evaluate the economic, financial or other information upon which our management bases its decisions.

You will experience immediate and substantial dilution in the net tangible book value per share of the Class A Ordinary Shares you purchase.

Because the price per Class A Ordinary Share being offered is substantially higher than the net tangible book value per share of our Class A Ordinary Shares, you will suffer substantial dilution in the net tangible book value of the Class A Ordinary Shares you purchase in this offering. Assuming a public offering price of \$[] per Class A Ordinary Share, if you purchase Class A Ordinary Shares in this offering, you will suffer immediate and substantial dilution of approximately \$[] per Class A Ordinary Share in the net tangible book value of the Class A Ordinary Shares. (See “Dilution”)

This is a best efforts offering, no minimum number or dollar amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans.

The Placement Agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities that must be sold as a condition to completion of this offering. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, Placement Agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to fund research and development of our lead product candidates, including clinical trial activities. Thus, we may not raise the amount of capital we believe is required for our operations in the short-term and may need to raise additional funds, which may not be available or available on terms acceptable to us.

There is no public market for the pre-funded warrants.

There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants on any national securities exchange or other nationally recognized trading system, including the Nasdaq Capital Market. Without an active market, the liquidity of the pre-funded warrants will be limited.

The pre-funded warrants in this offering are speculative in nature.

The pre-funded warrants in this offering do not confer any rights of Class A Ordinary Shares ownership on their holders, but rather merely represent the right to acquire Class A Ordinary Shares at a fixed price. In addition, following this offering, the market value of the pre-funded warrants, if any, is uncertain and there can be no assurance that the market value of the pre-funded warrants will equal or exceed their imputed offering price. The pre-funded warrants will be not listed or quoted for trading on any market or exchange.

Holders of the pre-funded warrants will not have rights of holders of our Class A Ordinary Shares until such pre-funded warrants are exercised.

Until holders of pre-funded warrants acquire Class A Ordinary Shares upon exercise of the pre-funded warrants, holders of pre-funded warrants will have no rights with respect to the Class A Ordinary Shares underlying such securities.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections titled “Prospectus Summary,” “Risk Factors,” and “Our Business,” as well as information we incorporated herein by reference, contains forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus and the documents incorporated herein by reference include, but are not limited to, statements about:

- the initiation, timing, progress and results of our preclinical and clinical trials, and our research and development programs;
- our ability to advance our drug candidates into, and successfully complete, clinical trials;
- our ability to identify and develop new drug and device candidates;
- our reliance on the success of our drug candidates currently undergoing preclinical development; in particular, our Lead Project candidates;
- the timing or likelihood of regulatory filings and approvals;
- the commercialization of our drug and device candidates, if approved;
- our ability to develop sales and marketing capabilities;
- the pricing and reimbursement of our drug candidates, if approved;
- the implementation of our business model, strategic plans for our business and technology;
- the scope of protection we are able to establish and maintain for IP rights covering our drug and device candidates and technology;
- our ability to operate our business without infringing the IP rights and proprietary technology of other parties;
- costs associated with defending IP infringement, product liability and other claims;
- regulatory development in the U.S., Europe and PRC and other jurisdictions;
- estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- the potential benefits of strategic collaboration agreements and our ability to enter into strategic arrangements;
- our ability to maintain and establish collaborations or obtain additional grant funding; the rate and degree of market acceptance of our drug and device candidates;
- developments relating to our competitors and industry, including competing therapies;

- our ability to effectively manage our anticipated growth;
- our ability to attract and retain qualified employees and key personnel;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- statements regarding future revenue, hiring plans, expenses, capital expenditures, capital requirements and share performance;
- the future trading price of our Class A Ordinary Shares and impact of securities analysts' reports on these prices; and
- other risks and uncertainties, including those listed under the caption "Risk Factors."

In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminologies. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors" and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

This prospectus contains market data and industry forecasts that were obtained from industry publications. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. While we believe the market position, market opportunity and market size information included in this prospectus is generally reliable, such information is inherently imprecise.

TRADEMARKS, SERVICE MARKS AND TRADENAMES

This prospectus contains trademarks, service marks and trade names of others, which are the property of their respective owners. Solely for convenience, the trademarks, service marks, logos and trade names referred to in this prospectus are included without the ® and ™ symbols. All trademarks, service marks and trade names appearing in this prospectus are, to our knowledge, the property of their respective owners. We do not intend our use or display of other companies' trademarks, service marks, copyrights or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies or unrelated parties.

USE OF PROCEEDS

Assuming all of the Class A Ordinary Shares and/or pre-funded warrants offered in this offering are sold, we estimate that our net proceeds from this offering will be approximately \$[•] million based on an assumed offering price of \$[•] per Class A Ordinary Share. However, because this is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, Placement Agent’s fees and net proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth on the cover page of this prospectus.

[•] [•] [•] [•] [•]	<i>Use of net proceeds</i>
	<i>approximately US\$ [•]</i>
	<i>approximately US\$ [•]</i>
	<i>approximately US\$ [•]</i>

As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds from this Offering. The amounts and timing of our actual expenditures may vary significantly from our expectations depending upon numerous factors, including the progress of our research, development and commercialization efforts, the progress of our preclinical trials, and our operating costs and capital expenditures. Drug discovery and development in the pharmaceutical industry is characterized by significant risks and uncertainties inherent in the research, clinical development and regulatory approval process. These uncertainties make it difficult for us to estimate the costs to conduct our research and development and complete our preclinical trials. Accordingly, we will retain broad discretion in the allocation of the net proceeds of this Offering, and we reserve the right to change the allocation of use of these proceeds as a result of contingencies such as the progress and results of our preclinical trials and our research and development activities, the results of our commercialization efforts, competitive developments and our manufacturing requirements. In addition, when and if the opportunity arises, we may use a portion of the proceeds to license, acquire or invest in complementary businesses, products, or technologies. In order to license, acquire or invest in complementary businesses, products or technologies, we may need to curtail our development of our other projects under development, or enter into agreements allowing others to obtain rights for further development of one or more of our drug and device candidates earlier than anticipated. We currently have no commitments or agreements to acquire any such businesses, products or technologies, and we cannot determine with certainty which, if any, of the programs above might be affected should we enter into any such commitments.

The net proceeds from this offering, together with our cash and marketable securities, may not be sufficient for us to fund any of our product candidates through regulatory approval, and we may need to raise additional capital to complete the development of our product candidates. We may satisfy our future cash needs through the sale of equity securities, debt financings, working capital lines of credit, corporate collaborations or license agreements, grant funding, through interest income earned on cash balances or a combination of one or more of these sources. This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from different preclinical and clinical trials, as well as any collaborations that we may enter into with third parties for our programs, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds. We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering.

DIVIDEND POLICY

We have never declared or paid cash dividends to our shareholders, and we do not intend to pay cash dividends in the foreseeable future. We intend to reinvest any earnings in developing and expanding our business. Any future determination relating to our dividend policy will be at the discretion of our Board of Directors and will depend on a number of factors, including future earnings, our financial condition, operating results, contractual restrictions, capital requirements, business prospects, our strategic goals and plans to expand our business, applicable law and other factors that our Board of Directors may deem relevant.

Under Cayman Islands law, dividends may be declared and paid only out of funds legally available therefor, namely out of either profit or our share premium account, and provided further that a dividend may not be paid if this would result in our Company being unable to pay its debts as they fall due in the ordinary course of business.

(See “Risk Factors – We have not paid dividends in the past and do not expect to pay dividends in the future, and any return on investment may be limited to the value of our shares” and “Description of Share Capital – Dividends”)

CAPITALIZATION

The table below sets forth our capitalization and indebtedness as of June 30, 2020:

- on an actual basis;
- on a pro forma basis, to give effect to the issuance of 22,437,754 Class A Ordinary Shares issuable upon conversion of the Class B Ordinary Shares; and
- on a pro forma as adjusted basis, to give effect to the issuance of [●] Class A Ordinary Shares in this Offering, each at an assumed price to the public of \$[●], after deducting placement agent commissions and estimated offering expenses, assuming that no pre-funded warrants are sold; (See “Description of Share Capital”).
- The table does not include any shares underlying the outstanding share options and warrants.

This table should be read in conjunction with management’s discussion and analysis of financial condition and results of operations and our financial statements, consolidated financial statements and related notes incorporated herein by reference.

The information discussed in the table below is illustrative only and will be adjust based on the actual public offering price, the actual number of Class A Ordinary Shares sold in this offering and other terms of this offering determined at pricing.

	June 30, 2020		
	Actual	Pro Forma	Pro Forma
	US\$	US\$	As Adjusted
			US\$
Equity			
Class A Ordinary Shares	7,950,986	30,388,740	[●]
Class B Ordinary Shares	22,437,754	-	[●]
Additional paid-in capital	33,184,104	33,184,104	[●]
Accumulated other comprehensive income	25,618	25,618	[●]
Accumulated deficit	(43,760,545)	(43,760,545)	[●]
Non-controlling interests	(2,315,532)	(2,315,532)	[●]
Total equity	17,522,385	17,522,385	[●]
Total capitalization	17,522,385	17,522,385	[●]

DILUTION

If you purchase Class A Ordinary Shares in this offering, assuming no value is attributed to the Placement Agent's Warrants, you will experience dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our Class A Ordinary Shares immediately after this offering. The net tangible book value of our Class A Ordinary Shares on June 30, 2020 was \$16.3 million, or \$0.54 per share. Net tangible book value per share is equal to the amount of consolidated total assets, less intangible assets, goodwill and consolidated total liabilities, divided by number of Ordinary Shares outstanding. Such calculation does not reflect any dilution associated with the exercise of the share options and warrants.

After giving effect to the assumed sale by us of an aggregate of [•] Class A Ordinary Shares in this offering at an assumed public offering price of \$[•] per share, after deducting the placement agent commissions and estimated offering expenses payable by us and assuming no value is attributed to the Placement Agent's Warrants and no Pre-Funded Warrants are sold, our as adjusted net tangible book value as of June 30, 2020 would have been \$[•] million, or \$[•] per share.

This represents an immediate increase in net tangible book value of \$[•] per share to existing shareholders and an immediate dilution of \$[•] per share to new investors purchasing Class A Ordinary Shares in this offering. The following table illustrates this per share dilution assuming no value is attributed to the Placement Agent's Warrants:

Assumed public offering price per share	\$	[•]
Net tangible book value per share as of June 30, 2020	\$	[•]
Increase in pro forma net tangible book value per share after giving effect to this offering		
As adjusted net tangible book value per share as of June 30, 2020 after giving effect to this offering	\$	[•]
Dilution per share to investors participating in this offering	\$	[•]

Each \$0.50 increase (decrease) in the assumed public offering price of \$[•] per share would increase (decrease) our as adjusted net tangible book value after this offering by \$[•] million, or \$[•] per share, and the dilution per share to new investors by \$[•] per share, assuming that the number of Class A Ordinary Shares offered by us, as set forth above, remains the same and after deducting the placement agent commissions and estimated offering expenses payable by us. We may also increase or decrease the number of Class A Ordinary Shares we are offering from the number of Class A Ordinary Shares set forth above. An increase (decrease) of 500,000 Class A Ordinary Shares in the number of Class A Ordinary Shares offered by us from the number of Class A Ordinary Shares set forth above would increase (decrease) our as adjusted net tangible book value after this offering by \$[•] million, or \$[•] per share, and the dilution per share to new investors by \$[•] per share, assuming that the public offering price remains the same and after deducting the placement agent commissions and estimated offering expenses payable by us. The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of Class A Ordinary Shares that we offer in this offering, and other terms of this offering determined at pricing.

The number of Class A Ordinary Shares reflected in the discussion and table above is based on 7,950,986 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares issued and outstanding as of June 30, 2020 and excludes outstanding share options and warrants (See "Capitalization").

SELECTED FINANCIAL DATA

The following summary consolidated balance sheets (successor basis) as of December 31, 2019 and 2018, consolidated statements of operations and comprehensive loss (successor basis) for the year ended December 31, 2019, 2018 and the period March 1, 2017 through December 31, 2017, as well as the statement of operations (predecessor basis) for the period January 1, 2017 through February 28, 2017, have been derived from our audited financial statements included in our Annual Reports, which are incorporated herein by reference. The related consolidated balance sheet as of June 30, 2020, consolidated statements of operations and comprehensive loss for the six months ended June 30, 2020 and 2019 have been derived from our unaudited financial statements that are incorporated herein by reference. The following summary consolidated balance sheet (successor basis) as of December 31, 2017 has been derived from our audited consolidated financial statements which is not included in this prospectus. You should read this data together with "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects" and the consolidated financial statements, related notes and other financial information included in our Annual Reports, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Report on Form 6-K furnished with the Commission on September 2, 2020, which are incorporated herein by reference and the information under the captions "Capitalization." Our historical results are not necessarily indicative of our future results. Our consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP.

You should not view our historical results as an indicator of our future performance.

The following table presents our summary consolidated statements of operations and comprehensive loss (successor basis) for the six months ended June 30, 2020 and 2019, the year ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017.

Selected Consolidated Statements of Operations and Comprehensive Loss (Successor Basis)

(In U.S. Dollars, except number of shares)

	Six months ended June 30, 2020	Six months ended June 30, 2019	Year Ended December 31, 2019	Year Ended December 31, 2018	March 1, 2017 through December 31, 2017
	(Unaudited)	(Unaudited)			
Revenue					
Healthcare services income	\$ 327,273	\$ 239,792	\$ 535,166	\$ 383,450	\$ -
Operating expenses					
Cost of healthcare services	(436,171)	(371,218)	(794,545)	(318,011)	-
Research and development expenses	(4,315,033)	(2,714,217)	(6,939,051)	(3,101,432)	(2,560,323)
General and administrative fees	(2,076,634)	(3,232,916)	(7,373,425)	(4,919,626)	(1,480,093)
Legal and professional fees	(1,540,304)	(2,008,774)	(3,405,705)	(1,811,770)	(1,395,490)
Other operating expenses	(641,457)	(120,788)	(220,891)	(560,709)	(257,177)
Total operating expenses	(9,009,599)	(8,447,913)	(18,733,617)	(10,711,548)	(5,693,083)
Other income (loss)					
Gain (loss) on investments in marketable securities, net	192,134	315,977	(81,839)	501,522	3,912,500
Gain on non-marketable investments	1,635,939	1,147,199	1,147,190	-	-
(Loss) gain on investments in derivatives, net	(101,233)	310,195	87,599	(974,444)	(827,501)
Gain on use of digital currencies	-	12,334	46,717	-	-
Changes in fair value of warrant liabilities	-	(866,300)	(866,300)	124,726	-
Gain on extinguishment of convertible debts	-	1,198,490	1,198,490	-	-
Interest (expense) income, net	(144,226)	(3,678,566)	(3,699,672)	(4,458,191)	44,269
Sundry income	111,398	128,444	249,328	-	-
Total other income (loss), net	1,694,012	(1,432,227)	(1,918,487)	(4,806,387)	3,131,576
Net loss	(6,988,314)	(9,640,348)	(20,116,938)	(15,134,485)	(2,561,507)
Less: net loss attributable to non-controlling interests	(783,749)	(551,877)	(1,430,176)	(302,762)	(14,045)
Net loss attributable to Aptorum Group Limited	<u>\$ (6,204,565)</u>	<u>\$ (9,088,471)</u>	<u>\$ (18,686,762)</u>	<u>\$ (14,831,723)</u>	<u>(2,547,462)</u>
Net loss per share – basic and diluted*	\$ (0.21)	\$ (0.31)	\$ (0.64)	\$ (0.53)	(0.09)
Weighted-average shares outstanding – basic and diluted	<u>29,956,393</u>	<u>28,978,151</u>	<u>29,008,445</u>	<u>27,909,788</u>	<u>26,963,435</u>
Net loss	\$ (6,988,314)	\$ (9,640,348)	\$ (20,116,938)	\$ (15,134,485)	\$ (2,561,507)
Other comprehensive income (loss)					
Unrealized loss on investments in available-for-sale securities	-	-	-	(1,122,251)	(367,782)
Exchange differences on translation of foreign operations	31,170	2,000	(10,897)	5,345	-
Other comprehensive income (loss)	<u>31,170</u>	<u>2,000</u>	<u>(10,897)</u>	<u>(1,116,906)</u>	<u>(367,782)</u>
Comprehensive loss	<u>(6,957,144)</u>	<u>(9,638,348)</u>	<u>(20,127,835)</u>	<u>(16,251,391)</u>	<u>(2,929,289)</u>
Less: comprehensive loss attributable to non-controlling interests	<u>(783,751)</u>	<u>(551,877)</u>	<u>(1,430,176)</u>	<u>(302,762)</u>	<u>(14,045)</u>
Comprehensive loss attributable to the shareholders of Aptorum Group Limited	<u>\$ (6,173,393)</u>	<u>\$ (9,086,471)</u>	<u>\$ (18,697,659)</u>	<u>\$ (15,948,629)</u>	<u>\$ (2,915,244)</u>

* The shares and per share data are presented at a weighted average basis to reflect the nominal share issuance.

The following table presents our summary statements of operations (predecessor basis) for the period January 1, 2017 through February 28, 2017.

Selected Statement of Operations (Predecessor Basis)
(In U.S. Dollars)

	January 1, 2017 through February 28, 2017
Investment income:	
Interest income	\$3,011
Total investment income	3,011
Expenses	
General and administrative fees	17,516
Management fees	108,958
Legal and professional fees	98,646
Other operating expenses	1,907
Total expenses	227,027
Net investment loss	\$ (224,016)
Realized and unrealized losses	
Net realized losses on investments in unaffiliated issuers	\$ (15,327)
Net change in unrealized depreciation on investments	(386,741)
Net realized and unrealized losses	(402,068)
Net decrease in net assets resulting from operations	\$ (626,084)

The following table presents our summary consolidated balance sheets (successor basis) as of June 30, 2020, December 31, 2019, 2018 and 2017.

	As of June 30, 2020	As of December 31, 2019	As of December 31, 2018	As of December 31, 2017
	(Unaudited)			
Cash, restricted cash and marketable securities	\$ 4,426,543	\$ 6,356,284	\$ 27,121,576	\$ 18,698,455
Total current assets	6,128,019	8,032,881	28,722,941	20,283,399
Total assets	23,309,075	23,954,218	45,074,640	31,559,982
Total current liabilities	3,080,408	2,674,675	12,184,865	1,330,734
Total liabilities	5,786,690	9,102,466	12,328,738	1,330,734
Total equity attributable to the shareholders of Aptorum Group Limited	19,837,917	16,361,208	33,114,435	30,243,293
Non-controlling interests	(2,315,532)	(1,509,456)	(368,533)	(14,045)
Total equity	17,522,385	14,851,752	32,745,902	30,229,248
Total liabilities and equity	\$ 23,309,075	\$ 23,954,218	\$ 45,074,640	\$ 31,559,982

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For purposes of this section, reference to the “Group” means Aptorum Group Limited and all of its subsidiaries.

Foreign Exchange Risk

Currency risk is the risk that the value of financial assets or liabilities will fluctuate due to changes in foreign exchange rates.

Currency risk sensitivity analysis

At June 30, 2020, December 31, 2019, 2018 and 2017, the Group has no significant foreign currency risk because most of the transactions are denominated in the United States dollars and Hong Kong dollar. Since the Hong Kong dollar is pegged to the United States dollar, the Group's exposure to foreign currency risk in respect of the balances denominated in Hong Kong dollars is considered to be minimal.

Credit Risk

Financial assets which potentially subject the Group to concentrations of credit risk consist principally of bank deposits and balances.

The Group takes on exposure to credit risk on cash and restricted cash balances held with HSBC, DBS Bank Ltd, Hong Kong Branch, Industrial and Commercial Bank of China (Macao) Limited, Bank of China (Hong Kong) Limited, and Silicon Valley Bank for the purposes of payments of Group expenses.

All transactions in listed securities are settled or paid for upon delivery using approved and reputable brokers. The risk of default is considered minimal, as delivery of securities sold is only made when the broker has received payment. Payment is made on a purchase when the securities have been received by the broker. The trade will fail if either party fails to meet its obligation. The Group limits its exposure to credit risk by transacting all of its securities and contractual commitment activities with broker-dealers, banks and regulated exchanges with high credit ratings and that the Group considers to be well established.

Liquidity Risk

Liquidity risk is the risk that the Group will encounter difficulty in raising funds to meet commitments associated with financial assets and liabilities. Liquidity risk may result from an inability to sell a financial asset quickly at an amount close to its fair value.

The Group invests in private equities which are generally unquoted and not readily marketable. The Group manages its liquidity risk by setting investment limits on unlisted securities that cannot be readily disposed of. Investment of the Group's assets in unquoted securities may restrict the ability of the Group to dispose of its investment at a price and time it wishes to do so.

Interest Rate Risk

Interest rate risk arises from the possibility that changes in interest rates will affect future cash flows or the fair values of financial instruments.

Interest rate risk sensitivity analysis

The Group's cash held with the Cash Custodian and the Custodian are exposed to interest rate risk. However, Management considers the risk to be minimal as they are short-term with terms less than one month.

Inflation Risk

In recent years, inflation has not had a material impact on our results of operations.

OUR BUSINESS

Overview

We are a pharmaceutical company dedicated to the discovery, development and commercializing of therapeutic assets to treat diseases with unmet medical needs, particularly infectious diseases and cancers (including orphan oncology indications). The pipeline of Aptorum is also enriched through the establishment of drug discovery platforms that enable the discovery of new therapeutics assets through, e.g. systematic screening of existing approved drug molecules, and microbiome-based research platform for treatments of metabolic diseases.

In addition to the above main focus, we are also pursuing therapeutic and diagnostic projects in neurology, gastroenterology, metabolic disorders, women's health and other disease areas. We also have projects focused on surgical robotics and natural supplement for women undergoing menopause and experiencing related symptoms. Also, we opened a medical clinic, AML Clinic, in June 2018.

Although none of our drug or device candidates has yet been approved for testing in humans, our goal is to develop a broad range of novel therapeutics and diagnostics across a wide range of disease/therapeutic areas. Key components of our strategy for achieving this goal include: (for details of our strategy, See "Our Strategy")

- Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas;
- Selectively expanding our portfolio with potential products from our drug discovery platforms that may be able to attain orphan drug designation and/or satisfy current unmet medical needs;
- Collaborating with leading academic institutions and CROs;
- Expanding our pharmaceutical development capabilities;
- Leveraging our management's expertise, experience and commercial networks;
- Obtaining and leveraging government grants to fund project development.

We have devoted a portion of the proceeds from our IPO, to two therapeutic projects ("Lead Projects"). The drug candidates being advanced as the Lead Projects are ALS-4 and SACT-1, described in further detail below. If the results of the remaining preclinical studies of these drug candidates are positive, we expect to be able to submit by second half of 2020, subject to regulatory review, an Investigational New Drug Application ("IND") for at least one of these candidates to the U.S. Food and Drug Administration ("FDA") or an equivalent application to the regulatory authorities in one or more other jurisdictions such as the China's National Medical Products Administration ("NMPA") and/or the European Medicines Agency ("EMA"). Acceptance of these applications by the relevant regulatory authority would enable the Company to begin testing that drug candidate in humans in that jurisdiction. Our ability to obtain any approval of such applications is entirely dependent upon the results of our preclinical studies, none of which have yet been completed.

Our current business consists of "therapeutics" and "non-therapeutics" segments. However, our focus is on the therapeutics segments. Because of the risks, costs and extended development time required for successful drug development, we have determined to pursue projects within our non-therapeutics segments, such as AML Clinic, to provide some interim revenue, as well as medical robots and natural supplements that may be brought to market and generate revenue more quickly.

Therapeutics Segment. In our therapeutics segment ("Aptorum Therapeutics Group"), we are currently seeking to develop various drug molecules and certain technologies for the treatment ("therapeutics") and diagnosis ("diagnostics") of human disease conditions to tackle unmet needs, in particular, our Lead Projects targeting infectious disease and cancer (including orphan oncology indications). In addition to our main areas of focus above, we are also pursuing therapeutic projects in neurology, gastroenterology, metabolic disorders, women's health and other disease areas, as well as the development of natural supplements for women undergoing menopause and experiencing related symptoms. Aptorum Therapeutics Group is operated through Aptorum's wholly-owned subsidiary, Aptorum Therapeutics Limited, a Cayman Islands exempted company with limited liability, whose principal place of business is in Hong Kong whose subsidiaries (who we sometimes refer to herein as project companies) are based in the United Kingdom, Singapore and Hong Kong.

Non-Therapeutics Segment. The non-therapeutics segment ("Aptorum Non-Therapeutics Group") encompasses three businesses: (i) the development of surgical robotics and medical devices, (ii) AML Clinic and (iii) sales of natural supplements. The development of surgical robotics and medical devices business is operated through Signate Life Sciences Limited, a subsidiary of Aptorum Therapeutics Limited. The outpatient clinic is operated through our subsidiary, Aptorum Medical Limited. Effective as of March 2018, we leased office space in Central, Hong Kong as the home to AML Clinic. AML Clinic commenced operations under the name of Talem Medical in June 2018. The clinic is currently generating revenue. The sale of natural supplements is operated through Nativus Life Sciences Limited ("Nativus"), a subsidiary of Aptorum Therapeutics Limited. As part of the commercialization, the Group, through Nativus, entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products. Through Multipak, the Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group's dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell®.

Prior to March 2017, the Company had pursued passive healthcare related investments in early stage companies primarily in the United States. However, we have since ceased pursuing further passive investment operations and intend to exit all such portfolio investments over an appropriate timeframe to focus resources on our current business.

On April 24, 2019, the Company signed an agreement with Aeneas Capital Limited, and A*ccelerate Technologies Pte. Ltd, the enterprise office of the Agency for Science, Technology and Research ("A*STAR"), (collectively, the "Parties") to co-create local deep tech startups. This agreement, which is part of A*ccelerate's venture co-creation ("VCC") initiative, commits all parties to the co-creation of local startups in the healthcare and life science sector (the "Master Collaboration Agreement"). Through this agreement, we partnered with A*Star to explore suitable opportunities, if identified, to set up tech ventures in Singapore over the next 5 years. A*STAR shall contribute a total of up to \$30,000,000 to any suitable startups, at their discretion. The Company and Aeneas Capital Limited will contribute a total of up to \$30,000,000 to any suitable startups at their discretion with a focus on (i) securing pilot customers; (ii) incorporation of the startups as companies and financial commitments of such customers; (iii) capital raising and capital market plans; (iv) recruiting and building of the startup teams; (v) equipment and infrastructure; and (vi) licensing of IP to the startups under the Technology License Agreements. The Master Collaboration Agreement shall continue for a period of 5 years, unless otherwise terminated or extended by the Parties.

Our Strategy

Although we plan to continue the development and improvement of a broad range of novel therapeutics and diagnostics across a wide range of disease/therapeutic areas, over the next 24-36 months we plan to concentrate on development of our Lead Projects, while also allocating some resources to develop SLS-1, maintaining our AML Clinic and sale of natural supplements.

We believe that execution of this strategy will position the Company to catalyze the development and improvement of a broad range of early-staged novel therapeutics and diagnostics across a wide range of disease/therapeutic areas. Failure to achieve positive results in at least one of the programs for a Lead Project could have a material adverse effect on the Company's prospects and business.

To achieve this goal, we are implementing the following strategies:

- **Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas.** We are currently developing drug and device candidates in several disease/therapeutic areas. We believe that by diversifying our research efforts, it would increase the likelihood that at least one of our projects will achieve clinical success and therefore add value to the Company. As of the date of this prospectus, the Company is developing 17 projects covering therapeutic assets, diagnostic assets, natural supplements and medical device projects, in broad range of areas across infectious diseases, cancers (including rare oncology indications), neurology, gastroenterology, metabolic disorders and women's health. The 17 projects are comprised of 9 exclusively licensed projects (including Lead Project ALS-4 being exclusively licensed from the University of Hong Kong) and 8 proprietary projects developed by our scientists (including Lead Project SACT-1). Our initial focus will be on developing our Lead Projects, but intend to continue developing our other current projects and may seek new licensing opportunities where we determine that the market potential justifies the additional commitment of our limited resources.
- **Selectively expanding our portfolio with potential products from our drug discovery platforms that may be able to attain orphan drug designation and/or satisfy current unmet medical needs.** We have selected innovations for development which we believe are of superior scientific quality, whilst taking into account the potential market size and demand for same, for example, taking into consideration whether the relevant product can satisfy significant unmet medical needs, particularly from our drug development platforms. In particular, Aptorum Therapeutics Limited has established a Scientific Assessment Committee, which helped us to select our current projects and which we expect will provide input from a scientific perspective towards any future opportunities for acquiring or licensing life science innovations.
- **Collaborating with leading academic institutions and CROs.** In building and developing our product portfolio, we believe that accessing external innovation, expertise and technology through collaboration with leading academic institutions and CROs is a vital and cost-efficient strategy. We have established strong relationships with leading academic institutions around the world and expect to continue to strengthen our collaborations by, for example, seeking to provide their affiliated Principal Investigators resources through sponsorship to conduct further research in specialty fields of interest and association with personnel connected to our current project companies, in exchange for obtaining for the Company the first right to negotiate for an exclusive license to any resulting innovations. In addition, we have entered and will continue to actively source arrangements with pharmaceutical companies, in most cases in roles as CROs, to streamline the development of our projects. This may include outsourcing part of the preclinical, clinical studies and clinical supplies manufacturing to externally accredited cGMP, cGMP and cGCP standard CROs or laboratories in order to attain the required studies for submission to the regulatory authorities as part of the clinical development plan. (See "Arrangements with Other Parties")
- **Expanding our pharmaceutical development capabilities.** We believe collaborations between the R&D Center and the scientists engaged in work for our project companies will enhance clinical and commercial potential of the projects. In addition, we will assist the project companies by engaging external pharmaceutical companies and/or CROs to outsource any part of the preclinical or clinical development work that cannot be performed by the R&D Center in order to obtain the resources necessary for our development process.
- **Leveraging our management's expertise, experience and commercial networks.** We believe the combination of our management's expertise and experience, with their academic and commercial networks make us an effective platform for advancing healthcare innovations towards clinical studies and commercialization in key global markets. We have assembled a management team with global experience and an extensive record of accomplishments in medical research, consulting and financing, and identification and acquisition of pharmaceutical and biopharmaceutical drug and device candidates. Our Head of Research and Development also has extensive experiences in drug development. We also employ key management personnel with banking and financial experience, which enhances our capability to establish the most efficient financial structure for the development of our programs.
- **Obtaining and leveraging government grants to fund project development.** Governments across the world pay close attention to the development of the biotechnology sector and provide support and funding. We intend to aggressively seek government support from the governments in the United States, the United Kingdom, Hong Kong, Singapore and elsewhere for our product development and to facilitate the development of some of our projects.

Arrangements with Other Parties

As mentioned above, part of our business model includes collaborating with research entities such as academic institutions and CROs, as well as highly regarded experts in their respective fields. We engage these entities and researchers either for purposes of exploring new innovations or advancing preclinical studies of our existing licensed drug candidates. Although the financial cost of these arrangements does not represent a material expense to the Company, the relationships we can access through, specifically, sponsored research arrangements ("SRAs") with academic institutions and organizations can provide significant value for our business; for example, we may decide whether to continue development of certain early-staged projects and/or out-license a project based on the data and results from research governed by SRAs. However, as of the date hereof, we do not consider the particulars of any of our SRAs to be material to the success of our current business plans.

Our drug discovery programs are based upon licenses from universities and are mainly conducted in universities via SRAs. As for the development of our drug candidates, our R&D Center conducts part of the CMC work. However, since our current facilities are not cGMP, cGLP or cGCP qualified, we will have to rely on CROs to conduct that type of work, if and when our drug candidates reach the level of development that requires such qualification.

Lead Projects, Natural Supplement and Other Projects under Development

We are actively operating and managing the development of our drug and device candidates through various subsidiaries. Each candidate is being researched in a subsidiary with a medical/scientific area of focus related to the drug and device candidate in development. We refer to these as our "Project Companies" and their products or areas of focus as either our Lead Projects (i.e., ALS-4 and SACT-1), our natural supplement (i.e., NativusWell®) or Other Projects under Development (as defined below). The selection of a drug and device candidate is based on our estimate of the market potential for that candidate, the scientific expertise required to develop it, and our overall corporate strategy, including our ability to commit personnel and future investment to that candidate.

To pursue a number of our current projects, our Project Companies have entered into standard license agreements with various university and licensing entities customized to the nature of each project. These license agreements largely contain the same terms, as is typically seen in license agreements for an early-stage life science invention; such terms include a worldwide license with licensed field comprising indications in the intended treatment areas, having upfront payments, certain royalty rates, sublicensing royalties, as well as provisions for payments upon occurrence of development and/or regulatory milestones. Under the license agreements, the Project Company must also adhere to certain diligence obligations and may or may not be required to obtain prior consent from the licensor to sublicense the invention. The license terms of our Lead Projects are discussed in detail below.

Generally speaking, pharmaceutical development consists of preclinical and clinical phases. Our immediate efforts would be on the preclinical phase which can further sub-divided into the following stages:

Target Identification & Selection: The target is the naturally existing cellular or modular structure that appears to have an important role in a particular disease pathway and will be targeted by the drug that will subsequently be developed. Target validation techniques for different disease areas can be very different but typically include from in vitro and in silico methods through to the use of whole animal models.

Lead Discovery: Following "Target Identification & Selection," compound screening assays are developed as part of the Lead Discovery. 'Lead' molecules can mean slightly different things to different researches or companies, but in this prospectus, we refer to Lead Discovery as the process of identifying one or more small molecules with the desired activity against the identified targets. Leads can be identified through one or more approaches, which can depend on the target and what, if any, previous knowledge exists.

Lead Optimization: In this stage of the drug discovery process, the aim is to produce a preclinical drug candidate by maintaining the desired and favorable properties in the lead compounds, while repairing or reducing deficiencies in their structures. For example, to optimize the chemical structures to improve, among others, efficacy, reduce toxicity, improve metabolism, absorption and pharmacokinetic properties.

IND-Enabling Studies: Includes all the essential studies such as GLP toxicology studies, pharmacology and efficacy, pharmacokinetics, in vitro metabolism, CMC studies, and the data of which are used for IND submission.

In vitro validation: At this stage, the efficacy and safety of a drug candidate are assessed at cellular levels.

In vivo validation: At this stage, the efficacy, safety and pharmacokinetic of a drug candidate are assessed in animal models.

→ Lead Projects → Other Projects → Non-Developing Projects

Approved Drug Candidates

Project	Candidate / Modality	Indication	Compassionate Access	In vitro Antiviral	Existing Post- Clinical Safety Data	In vivo Antiviral	Phase 1 Pre-screening & Selection	Phase II (Long Term?)
SAC1 Series								
SAC1-1	Repospiron Drug Molecule	Neurodegenerative						
SAC1-2	Repospiron Drug Molecule	To be disclosed						
SAC1-3	Repospiron Drug Molecule	To be disclosed						
SAC1 QD018	Repospiron Drug Molecule	Cardiovascular Disease (CVD) HR						

New Drug Candidates

Project	Candidate / Modality	Indication	Target Approved & Refined	Lead Chemistry	Lead Formulation	IND-enabling	Phase 1	Phase 2	Phase 3
Anticancer / Cancer									
AG-4	Small molecule	Treatment of bacterial infections caused by <i>Streptococcus agalactiae</i> including MRSA							
AG-1	Small molecule	Treatment of viral infections caused by influenza virus A							
AG-2	Small molecule	Treatment of bacterial infections caused by <i>Streptococcus agalactiae</i> in women including MRSA							
AG-3	Small molecule	Resolving existing antibiotic resistance drug resistance							
Other Areas									
GS-1	Macromolecules	Treatment of Obesity							
GS-2	To be disclosed	To be disclosed							
GS-3	To be disclosed	To be disclosed							
Primary Care									
NS-1	Small molecule	Treatment of Endometriosis							
Other Areas									
SPR-1	SPR-1 Natural Quinoline Derivative	Treatment of Liver Cancer							
Oral Care									
VSR-2	MRSA	Treatment of Acinetobacter & Pseudomonas's Disease							
VL-4	Imaging Agent for MRSA Diagnosis	Diagnosis of Acinetobacter's Disease							

Natural / Supplement

Project	Modality	Target Condition	Formulation	Commercialization
Antiviral TM / PR-10	Substance	Widespread underlying infections		

Medical Devices

Project	Candidate / Modality	Indication	Life-Saved Potential	Animal Test	IDE Application Approved	Safety Feasibility Clinical Study	Prevalence Study	Process of Clearing PMDA
Prevalence Studies								
NS-1	Robotic Catheter Platform for Living Operative MRSA-Guided Cardiac Catheterization	Heart Rhythm Disorders by Catheter Electrophysiology Intervention						

¹ Clark Cheng, our Chief Medical Officer and an Executive Director, owns 7% of Aptorum Medical Limited as of the date of this prospectus.

We anticipate allocating approximately 20% of our resources to develop projects other than our Lead Projects (such other projects being referred to herein as “Other Projects under Development”), with a strong focus on NativusWell®, SLS-1 and AML Clinic. As part of the commercialization of NativusWell® natural supplement NativusWell®, we entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products. Through Multipak, the Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptomum Group’s dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell®. As a device candidate, SLS-1 may not need to undergo the same regulatory approval process as a drug candidate and therefore we may be able to bring it to market sooner. AML Clinic is expected to provide us with a modest amount of revenue. Even if NativusWell® and SLS-1 achieves commercial sales, of which there can be no assurance, revenue from these products alone will not be sufficient for us to carry out all of our plans, but it will assist with name recognition and supplement our income while we develop our Lead Projects.

Lead Projects



After consideration of various factors, such as time and resources required for further development, potential success rate and market size, the Group decided to focus the majority of its resources on ALS-4 and SACT-1 as the current Lead Projects. The Group will continue to invest some of its resources to develop other projects, including those previously classified as Lead Projects.

ALS-4: Small molecule for the treatment of bacterial infections caused by Staphylococcus aureus including Methicillin-resistant Staphylococcus aureus (“MRSA”)

Bacteria such as *Staphylococcus aureus*, *Mycobacterium tuberculosis* and *Pseudomonas aeruginosa* have become “superbugs”, having developed resistance to many, if not all, of the existing drugs available to treat them, rendering those treatments ineffective in many instances. MRSA is one such bacterium, a gram-positive bacterium that is genetically different from other strains of *Staphylococcus aureus*. *Staphylococcus aureus* and MRSA can cause a variety of problems ranging from skin infections and sepsis to pneumonia and bloodstream infections. It is estimated that about one out of every three people (33%) carry *Staphylococcus aureus* in their nose, usually without any illness; about two in a hundred (2%) carry MRSA (source: <https://www.cdc.gov/mrsa/tracking/index.html>). Both adults and children may carry MRSA.

Most MRSA infections occur in people who have been in hospital or other health care settings, such as nursing homes and dialysis centers (source: <https://www.mayoclinic.org/diseases-conditions/mrsa/symptoms-causes/syc-20375336>), which is known as Healthcare-Associated MRSA (“HA-MRSA”). HA-MRSA infections are typically associated with invasive procedures or devices, such as surgeries, intravenous tubing or artificial joints. Another type of MRSA infection, known as Community-Associated MRSA (“CA-MRSA”), has occurred in wider community among healthy people. It often begins as a painful skin boil and spreads by skin-to-skin contact. About 85% of serious, invasive MRSA infections are healthcare associated infections (<https://www.cdc.gov/media/pressrel/2007/r071016.htm>). The incidence of CA-MRSA varies according to population and geographic location. In the U.S., more than 94,000 people develop serious MRSA infection and about 19,000 patients die as a result each year (<https://www.cdc.gov/media/pressrel/2007/r071016.htm>). According to the US Centers for Disease Control and Prevention (“CDC”), *Staphylococcus aureus*, including MRSA, caused about 11% of healthcare-associated infections in 2011 (source: <http://www.healthcommunities.com/mrsa-infection/incidence.shtml>). Each year in the U.S., around one out of every twenty-five hospitalized patients contracts at least one infection in the hospital (N Engl J Med. 2014; 27:370(13):1198-208). In the U.S., there were over 80,000 invasive MRSA infections and 11,285 related deaths in 2011 (source: <https://edition.cnn.com/2013/06/28/us/mrsa-fast-facts/index.html>). Indeed, severe MRSA infections most commonly occur during or soon after inpatient medical care. More than 290,000 hospitalized patients are infected with *Staphylococcus aureus* and of these staphylococcal infections, approximately 126,000 are related to MRSA (source: <http://www.healthcommunities.com/mrsa-infection/incidence.shtml>).

ALS-4 is a small drug molecule which appears to target the products produced by bacterial genes that facilitate the successful colonization and survival of the bacterium in the body or that cause damage to the body’s systems. These products of bacterial genes are referred to as “virulence expression.” Targeting bacterial virulence is an alternative approach to antimicrobial therapy that offers promising opportunities to overcome the emergence and increasing prevalence of antibiotic-resistant bacteria.

Professor Richard Kao from The University of Hong Kong (who is also the Founder and Principal Investigator of Acticle and Inventor of ALS-2, ALS-3 and ALS-4) initiated a high throughput approach for screening compounds which are active against virulence expression, which resulted in the discovery of ALS-2, ALS-3 and ALS-4.

ALS-4 targets an enzyme essential for *Staphylococcus aureus* (including MRSA) survival in vivo. This enzyme is involved in the production of Staphyloxanthin, a carotenoid pigment produced by *Staphylococcus aureus* including MRSA, and is responsible for the characteristic golden color. This pigment has proven to be an important factor in promoting bacterial invasion as well as rendering the bacteria resistant to attack from reactive oxygen species (ROS) and neutrophils. In other words, pigmented bacteria have increased resistance to the host's immune defenses. ALS-4 may have particular value if it can be shown to be an effective therapy in situations where a *Staphylococcus aureus* infection is resistant to available antibiotics (i.e., where the pathogen is MRSA).

In a recent study by the inventor, Prof. Richard Kao, ALS-4 demonstrates potent activity against *Staphylococcus aureus* pigment formation in vitro, as indicated in Figure 1, with an IC₅₀ (IC₅₀ is defined as the concentration of a drug which inhibits half of the maximal response of a biochemical process. In this case, inhibition of the formation of the golden pigment is the response) equal to 20 nM.

Figure 1

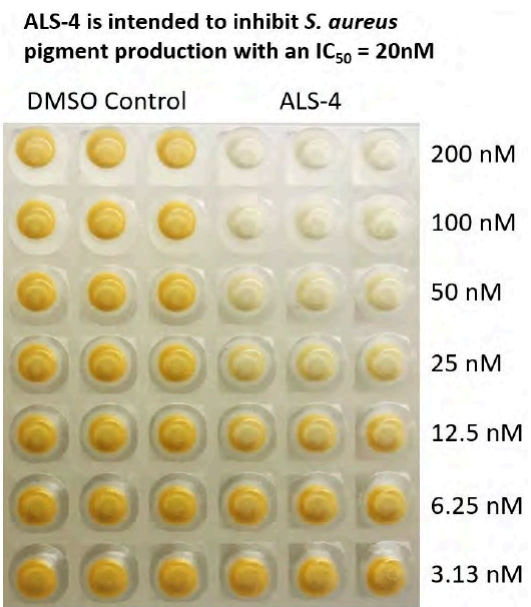


Figure 1: In vitro pigment inhibition by compound ALS-4.
(A) Inhibition of wild-type (WT) *Staphylococcus aureus* pigmentation in the presence of increasing concentrations of ALS-4.
(B) Pigment inhibition by ALS-4; the IC₅₀ for pigment formation is roughly 300 nM.
All data represent mean values ± SD.
NP16 = ALS-4
This assay was conducted in triplicate and repeated twice for confirmation
(Adapted from mBio (8(5): e01224, 2017))

By employing a systemic *Staphylococcus aureus* rat infection model, the treatment (10mg/kg of ALS-4 twice daily) and control groups (vehicle) were compared. In the lethal dose model, all the animals died by day 4 in the control group. On the contrary, the ALS-4 treated group showed >50% survival until the end of the study (Day 7), which is determined to be statistically significant compared with the control ($p = 0.0102$ by a Log-rank (Mantel-Cox) test).

(Mantel-Cox) test

In the delayed treatment model, ALS-4 brought a statistically significant reduction in bacterial count (99.5%) compared with the control ($p = 0.0126$ by an unpaired student's t-test).

Figure 2

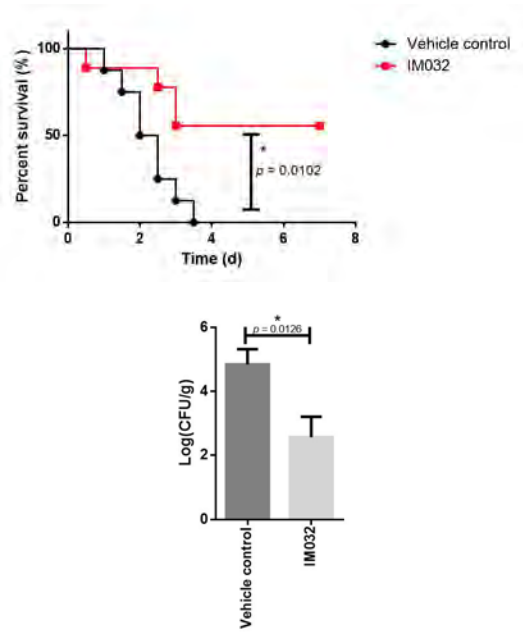


Figure 2: ALS-4 is observed to reduce bacterial load in mice

CFU = Colony Forming Unit, a unit used to estimate the number of viable bacteria in a sample

ALS-4 is currently undergoing IND enabling stage to prepare for regulatory submission for a Phase 1 clinical trial. The development of ALS-4 candidate has been progressing well and the first series of GLP toxicology studies have been completed through an appointed contract research organization (CRO) based in Canada. In particular, ALS-4 candidate did not show any mutagenicity in the in vitro Ames tests. ALS-4 development is on our proposed track and we target the related regulatory submission for a Phase 1 clinical trial in the second half year of 2020 in Canada.

Patent License

On October 18, 2017, the Company's subsidiary, Acticle, entered into an exclusive license agreement with Versitech Limited, the licensing entity of HKU, for ALS-4. Subsequently on June 7, 2018, the parties entered into a first amendment to the exclusive license agreement, and on July 10, 2019, the parties entered into a second amendment to the license agreement.

On January 11, 2019, Acticle and Versitech Limited entered into a second license agreement for ALS-4, where Acticle exclusively licensed the intellectual property rights on certain HKU-owned improvements to the original licensed invention.

Under the exclusive license agreements, we were granted an exclusive, royalty-bearing, sublicensable licenses to develop, make, have made, use, sell, offer for sale and import products that are covered by the licensed patents (as described below). The territory of the licenses is worldwide and the field of the licenses is for treatment or prevention of bacterial infections caused by *Staphylococcus aureus* including MRSA and bacterial virulence.

We paid an upfront fee upon entering into the license agreements. We are required to pay less than 10% of the net sales of the licensed products sold by us or our affiliates as royalties, as well as a low teens percentage of sublicense royalties that we receive from our sublicensees, if any. In addition, we agreed to pay to the licensor aggregate regulatory milestones of up to US\$1 million subject to the following achievements: submission of investigational new drug application; completion of phase 1, 2 and 3 clinical trials; and submission of new drug application; grant of regulatory approval. We also agreed to pay to the licensor aggregate sales milestones of up to US\$7.8 million subject to the following achievement: first commercial sale; and annual net sales exceeding US\$100 million in one jurisdiction.

Pursuant to the license agreements, Acticle became the exclusive licensee of 2 pending U.S. non-provisional patent applications and 2 PCT applications (now expired). Prior to the expiration of the PCT applications, we filed national phase applications in member states of the EPO, in PRC and 11 other jurisdictions. The claimed inventions are described as: "Compounds Affecting Pigment Production and Methods for Treatment of Bacterial Diseases."

Acticle has the right to grant sublicenses to third parties under the license agreements without prior approval from Versitech Limited and to assign the agreements to any successor to the business related to the licenses. In the event that Acticle makes an improvement to the licensed technologies, so long as the improvement does not incorporate any licensed patents, Acticle will be the owner to such improvement, subject to a non-exclusive royalty-free license being granted back to Versitech Limited for academic and research purposes only.

The exclusive license agreements shall be in effect until the expiration of all licensed patents. Acticle may terminate the licenses at any time with 6-month written notice in advance. Either party may terminate the agreements upon a material breach by other party.

SACT-I: A Repurposed Drug for the Treatment of Neuroblastoma

Drug repurposing is a strategy for identifying new indications for approved or investigational drugs that are outside the scope of the original medical uses. It is often viewed as a lower-cost method for drug commercialization, as it is based on already-approved drugs (which has been proven to be safe for human use by the respective governing regulatory agency) and explores new target indications. (Ashburn, T. T. & Thor, K. B. Drug repositioning: identifying and developing new uses for existing drugs. *Nat. Rev. Drug Discov.* 3, 673–683, 2004).

One of the advantages of drug repurposing is a lower development risk due to safety and toxicity, as well as other properties related to water solubility, absorption, distribution and metabolism, as the safety and CMC profiles of marketed drugs are usually well-established. Due to the same reason, the development time is also shortened because there is no need to repeat the whole spectrum of the safety assessment. As a result, the drug repurposing approach appears to be attractive due to its superior risk management, smaller capital investment and quicker financial return. (Sudeep Pushpakom, et. al. Drug repurposing: progress, challenges and recommendations. Nat. Rev. Drug Discov. 18, 41-58, 2019)

The cost of bringing a repurposed drug is estimated to be around US\$300 million, which is only one-tenth of the development cost for a new drug. (Nosengo, N. Can you teach old drugs new tricks? Nature. 534, 314-316, 2016).

In summary, drug repurposing offers the following advantages:

- Well-established safety profiles: The development risk for new indications can be substantially reduced by applying existing drugs that are approved or have been shown to be safe in large scale late-stage trials. Since safety accounts for approximately 30% of drug failures in clinical trials, this is a key advantage that repositioned drugs can harness to great effect. (Key benefits of drug repositioning. (n.d.). Retrieved from <http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Time-saving: As repositioned drugs can rely on existing data, including efficacy and toxicity studies, the process is usually faster than de novo development. Developing a new chemical entity (NCE) can take 10 to 17 years, depending on indications. (Roin, B. N. Solving the Problem of New Uses, 2013). For a drug repositioning company, the development process from compound identification to launch can be around 3 to 8 years. (Walker, N. (2017, December 07). Accelerating Drug Development Through Repurposing, Repositioning and Rescue. Retrieved from <https://www.pharmoutsourcing.com/Featured-Articles/345076-Accelerating-Drug-Development-Through-Repurposing-Repositioning-and-Rescue/>)
- Cost-saving: Along with time-saving, money-saving is also a key benefit. With a single compound to enter clinical trials costing around US\$10 to \$20 million, the cost of identifying a repositioning candidate that already has phase 1 data could be as low as US\$2 to \$3 million. (<http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Potential for out-licensing: Pharmaceutical companies are said to be exploring new models to out-license some of their clinical drug candidates that may have been shelved for pure business reasons unrelated to safety or efficacy, even though they have met their endpoints and have proven themselves to be safe. If such drugs were to be repositioned, the pharmaceutical company increases the attractiveness of these drugs and gives itself more options to find interested buyers. (<http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Lower failure rate: According to BCC Research, approval rates for repurposed drugs are close to 30%, which is greater than the approval rate for new drug applications. (Front Oncol. 2017; 7: 273)

One of the major limitations of the current drug repurposing and repositioning practice is that there is a lack of a systematic way to identify and reinvestigate drugs that are approved and/or have failed approval.

SACT-1 is the first repurposed drug candidate to be developed under the Smart-ACT[®] drug discovery platform. SCAT-1 is one of the Company's proprietary technologies. Our first targeted indication is neuroblastoma. Neuroblastoma is a rare form of cancer, and classified as an orphan disease, that forms in certain types of nerve tissue and most frequently in the adrenal glands as well as spine, chest, abdomen or neck, predominantly in children, especially for those aged 5 years and below. For the high-risk group, which is close to 20% (Annu Rev Med. 2015; 66: 49-63.) of total new patient population per year, the 5-year survival rate of this condition is around 40-50% as observed by the American Cancer Society (<https://www.cancer.org/cancer/neuroblastoma/detection-diagnosis-staging/survival-rates.html>). The current high drug treatment cost for high risk patients can average USD200,000 per regimen (all 6 cycles) (https://www.cadth.ca/sites/default/files/pcode/Reviews2019/10154DinutuximabNeuroblastoma_fnEGR_NOREDACT-ABBREV_Post_26Mar2019_final.pdf). In addition, most pediatric patients often do not tolerate or survive the relevant chemotherapy stage which, subject to further clinical studies, may be positively addressed by the SACT-1 candidate due to the potential synergistic effects when applied with standard chemotherapy.

In our recent studies, SACT-1 has been shown to be effective against numerous neuroblastoma cell lines, of which 2 are MYCN-amplified cells, which represent the high-risk neuroblastoma patient group. In addition, by using a bliss score as a quantitative measure of the extent of drug interaction, Aptorum Group has seen a high and robust synergism between SACT-1 and traditional chemotherapy in vitro (Figure 3), indicating a potential efficacy enhancement/dose reduction of the chemotherapy.

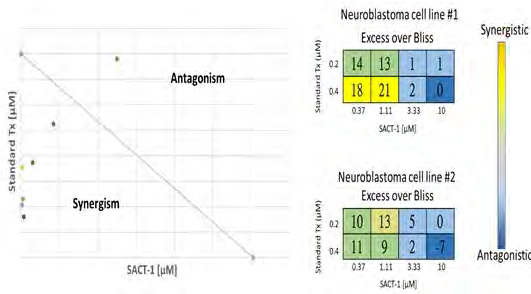


Figure 3 synergism between SACT-1 and traditional chemotherapy in vitro

In addition, in our recent study, the maximum tolerable dose of SACT-1 in a rodent model was determined to be higher than 400mg/kg. Compared with the MTD of standard chemotherapy such as paclitaxel (20-30mg/kg) (Clin Cancer Res. 5(11):3632-8) and cisplatin (6mg/kg) (BMC Cancer 17: 684 (2017)), the safety profile of SACT-1 appears to be very impressive. Based on our internal observations of pre-existing information from approved products, (subject to FDA's approval and on a case-by-case basis, a 505(b)2 Application can rely in part on existing information from approved products (such as the FDA's previous findings on safety and efficacy) or products in literature (such as data available). However, typically speaking, the applicant is nonetheless required to carry out a Phase 1 bridging study to compare the Reference Listed Drug and reference the established safety and efficacy information), SACT-1 also exhibits a well-established safety profile: at 150mg/day, the death rate was 0% in prior clinical studies with no dosage related adverse events (Table 1). In addition, the pharmacokinetic profile of SACT-1 has also been reported (Table 2).

Table 1: Safety Profiles of SACT-1 in Human Clinical Trials

SACT-1	25mg/day (N=93)	75mg/day (N=95)	150mg/day (N=91)
Median treatment duration, weeks	101	100	100
Adverse events (AE)			
Any grade 2-4 AE at least possibly related to SP055	20%	20%	21%
AEs leading to discontinuation	9%	12%	14%
Any serious AE	13%	14%	10%
Deaths	0%	2%	0%

Table 2: The pharmacokinetic Profile of SACT-1 in Humans

SCAT-1 pharmacokinetic parameter in humans	(N=19)
t _{max} , h	5
C _{max} , ng/ml	~300
AUC _{last} , ng·h/ml	~10,000
AUC _{inf} , ng·h/ml	~11,000
t _{1/2,term} , h	~48

We are currently developing a pediatric formulation of SACT-1 to better address the needs of neuroblastoma patients who are exclusively children younger than 5. SACT-1 is undergoing preparation for IND submission and is on track for regulatory application to target to commence phase 1b/2a clinical trials under the US FDA's 505(b)(2) pathway.

SACT-1 is a proprietary technology not subject to any license agreement. As of the date of this prospectus, we have filed U.S. provisional application for such proprietary technology and intend to submit a non-provisional application before the expiration of the U.S. provisional application.

Statistical Significance

The term statistical significance is to define the probability that a measured difference between two groups (e.g. two treatment groups, treatment versus control groups) is the result of a real difference in the tested variations and not the result of chance. It means that the result of a test does not appear randomly or by chance, but because of a specific change that is tested, so it can be attributed to a specific cause.

The confidence level indicates to what percentage the test results will not commit a type 1 error, the false positive. A false positive occurs when a change in the result is due to randomness (or other noise) and not the change in variations. At a 95% confidence level (p = 0.05), there is a 5% chance that the test results are due to a type 1 error. 95% has become the standard and usually be the minimum confidence level for the tests. To make the test more stringent, a 99% confidence level (p = 0.01) is also commonly employed, which means that there is a 1% chance that the test results are due to a type 1 error.

In other words, a p value represents the confidence level. For example, if the p-value for a test is < 0.05 , it means that there is less than 5% chance the difference between two groups is due to random error or by chance. If the p-value is < 0.01 , it means that there is less than 1% chance the difference between two groups is due to random error or by chance.

We employed statistical testing to compare different treatment groups in animal studies simply for proof of concept and to aid internal decision making for further development. We do not intend to use this standard for any regulatory submission. The US FDA or other regulatory agencies may not necessarily employ the same statistical standard to assess the efficacy in clinical trials, the results of which would be submitted for regulatory approval. Although a p-value of 0.05 has become the standard, the US FDA or other regulatory agencies may also individualize their efficacy standard for different clinical programs based on the indications, the purpose of a clinical trial, among others.

FDA Application Status

As of the date of this prospectus, we have not submitted any applications for investigational new drugs ("IND") to the US Food and Drug Administration ("FDA"). In the fourth quarter of 2020, subject to regulatory review, we expect to be in a position to submit at least one application for one of our drug candidates to commence trials in humans (INDs to the FDA or an equivalent application to the regulatory authorities in another jurisdiction such as the China's National Medical Products Administration (the "NMPA"), the European Medicines Agency ("EMA"), or Health Canada). However, there can be no assurance we will be able to make any such application by such time. Should we be delayed in making such filing or should such filing not be approved, our business will be adversely affected.

Other Projects under Development

The following provides additional detail regarding Other Projects under Development. As noted elsewhere in this prospectus, based on certain criteria, we sometimes cease work on certain projects to focus on projects we believe are more promising. We typically discontinue the development of a candidate because the expected result could not be generated, so we decided to focus our capital and efforts on our other candidates.

SACT-COV19: Drug repurposing for the treatment of infections caused by COVID-19

SACT-COV19 is a drug repurposing program for the treatment of infections caused by COVID-19. We have completed initial screening under the Smart-ACT[®] platform to select, out of more than 2,600 small drug molecules that were previously approved for other indications, at least 3 potential candidates for further preclinical investigation against the new coronavirus disease, COVID-19. We are collaborating with Toronto based Covar Pharmaceuticals and have also entered into agreement with the University of Hong Kong and University of Oxford to conduct further preclinical investigation of the selected candidates prior to seeking approval from regulatory agencies to initiate clinical trials on suitable candidates.

Drug candidates from the SACT-COV19 program are currently undergoing in vitro validation.

ALS-1: Small molecule intended for the treatment of viral infections caused by Influenza virus A

Professor Richard Kao, the Inventor of ALS-1, was the first to identify viral nucleoproteins (NP) as an effective drug target (Nature Biotechnology. 28:600-605) We are exploring ALS-1 as a potential treatment for viral infections caused by Influenza virus A.

It is our hypothesis that Influenza A NP is an essential protein for the proliferation of the influenza virus. ALS-1 targets NP and triggers the aggregation of NP and this prevents the aggregated NP from entering the nucleus. In an animal study published by the inventor, Prof. Richard Kao, in Nature Biotechnology (28 (6): 600, 2010), after treating with ALS-1, 50% of the mice receiving two doses of ALS-1 (100 μ l of 2.3 mg/ml ALS-1) per day for 7 days survived for more than 21 days compared with 100% mortality in the treatment-free control group within 7 days. In addition, about a 10x reduction of viral load in the lungs of the ALS-1-treated mice was observed compared to the untreated control group. The animal study results suggest that ALS-1 has the potential to be developed into a useful anti-influenza therapeutic.

ALS-1 is designed to target a broad range of NP variants, a novel therapeutic target. Compared with the currently marketed antiviral drugs for which the viruses have acquired extensive resistance, ALS-1 acts on a completely different therapeutic target.

ALS-1 is currently undergoing Lead Optimization to optimize its drug-like properties.

ALS-2: Small molecule for the treatment of bacterial infections caused by Staphylococcus aureus including MRSA

ALS-2 is a next generation small molecule targeting bacterial virulence for the treatment of bacterial infections caused by Staphylococcus aureus including MRSA. In a recent paper published by the inventor, Professor Richard Kao from The University of Hong Kong (also the Founder and Principal Investigator of Acticle), in PNAS (115(310: 8003, 2018), ALS-2 suppresses the expression of multiple virulence factors in Staphylococcus aureus simultaneously. In a lethal infection mouse model, compared with the vehicle group, ALS-2 protected against Staphylococcus aureus for all the mice in the group, with significant differences between the treatment and control groups [P = 0.0057, by log-rank (Mantel-Cox) test].

ALS-2 is currently at the Lead Optimization stage to optimize its drug-like properties.

ALS-3: Small molecule acting synergistically with certain existing antibiotics

ALS-3 is a novel small molecule that is at present under investigation to combine with certain classes of existing antibiotics to overcome drug resistance. We are exploring ALS-3 for the treatment of bacterial infections including MRSA. ALS-3 is currently at the Lead Optimization stage to optimize its drug-like properties.

CLS-1: An orally administered macromolecule for the treatment of obesity based on chemical signaling of gut microbiome

The prevalence of obesity continues to escalate globally; however, there is no current optimal therapy for this condition. For the majority of obese patients, conventional medical therapies (i.e., diet, exercise, behavioral counseling) often have a high failure rate for the long term. (Obes Surg. 2012;22(6):956-66). We believe current pharmacotherapy has limited efficacy and is associated with substantial safety issues.

Chemical signaling of gut microbiota is known to be one of the major causes of obesity. CLS-1 is an orally administered non-absorbable macromolecule that we believe modulate the metabolite excreted by gut microbiota with high affinity and specificity. In this way, we believe the absorption of this particular metabolite, which is linked to obesity, can be inhibited.

CLS-1 is undergoing Lead Optimization.

NLS-1: A Derivative of Epigallocatechin-3-Gallate ("Pro-EGCG") for the treatment of Endometriosis

NLS-1, a drug molecule derived from natural products (green tea), is currently under development for the treatment of endometriosis, a disease in which the tissue that normally lines the uterus (endometrium) grows outside the uterus.

NLS-1 acts as an anti-angiogenic to offer a potential novel treatment of endometriosis. In a paper published by the inventors in Angiogenesis (16:59, 2013), NLS-1 brought a statistically significantly reduction in the lesion size and weight compared with EGCG and the control without any treatment in an experimental endometriosis mouse model (Student t-test, $p < 0.05$). In addition, the inhibition by NLS-1 in all of the angiogenesis parameters was statistically significantly greater than that by EGCG (Student t-test, $p < 0.05$). In addition, NLS-1 significantly (Student t-test, $p < 0.05$) reduces the lesion size in both prevention and treatment group compared with both saline and EGCG groups. Moreover, NLS-1 also had better bioavailability and greater antioxidation and anti-angiogenesis capacities compared with EGCG. As a follow-up study in an animal model of endometriosis, orally administered NLS-1 reduced the lesion size significantly better than oral EGCG ($p < 0.05$ -0.001 at week 3- 8, ANOVA) and other hormone-based therapy such as intramuscular GnRH analog ($p < 0.05$ at week 4-8, ANOVA) and other synthetic anti-angiogenesis agents such as intraperitoneal PTK787 ($p < 0.05$ -0.01 at week 4-8, ANOVA). Regarding safety, there was no signs of stress to NLS-1 administration were observed during the treatment period. No significant weight change was observed over the course of the experiment. Histological examination revealed no obvious reproductive effects on ovarian follicles and endometrial glands under NLS-1 treatments. Also, vascularization of the ovaries and the uterus was not affected in the NLS-1 treatment group.

Lead optimization has been completed and it is currently undergoing a preparatory phase to enter IND-enabling studies.

SPLS-1: A quinoline derivate for liver cancer treatment

SPLS-1, a novel quinoline derivative from Ephedra pachyclada, is at present under active investigation for the treatment of liver cancer. It is currently at the Lead Discovery stage.

VLS-2: mTOR-independent transcription factor EB activator ("MITA") as autophagy activator for treatment of neurodegenerative diseases

Autophagy is an endogenous cellular mechanism for clearing multiple pathological protein aggregates including tau, the presence of which is believed to account for neurodegeneration in AD and other neurodegenerative diseases. mTOR is part of a biological pathway that is a central regulator of mammalian metabolism and physiology. Inhibition of mTOR activity is associated with various side effects, such as immunosuppression. Many other molecules that activate autophagy also inhibit mTOR activity. VLS-2 is a small drug molecule that appears to activate autophagy without inhibiting mTOR function. VLS-2 is currently at the Lead Discovery stage.

VLS-4: Other contrast agents for MRI diagnostics

The Company is actively developing a new class of MRI contrast agents for diagnosis of neurodegenerative diseases. The design of these agents takes into consideration the physicochemical properties that need to be optimized for best imaging performance, and the novel agents are currently undergoing rigorous evaluation. VLS-4 is currently at the Lead Discovery stage.

SLS-1: Robotic Catheter Platform for Intra-operative MRI-guided Cardiac Catheterization

SLS-1 is our robotic catheter platform for MRI-guided cardiovascular intervention for the treatment of arrhythmia. The platform consists of a magnetic resonance imaging-guided ("MRI-guided") robotic electrophysiology ("EP") catheter system, an MR-based positional tracking unit, and a navigation interface. This platform has the potential to offer a major step toward achievement of several clinical goals: (i) enhancing catheter manipulation and lesion ablation, which we believe will decrease the chance of arrhythmia recurrence; (ii) improving the safety of catheter navigation, thereby decreasing the rates of undesired or inadvertent tissue damage; and (iii) enhancing catheter control, thus facilitating shorter learning curves for surgeons and better treatment in more complex patient cases. Should such goals be demonstrated, patient outcomes should be improved, compensating for the cost of using MRI and reducing the overall expenditure.

To date, a product prototype has been developed. Lab-based experiments have been conducted to verify the performance of the robot towards an image-guided pulmonary vein isolation ("PVI") task. The MR-based tracking unit has also been developed and validated in MRI scanners. The next step is to test the robotic catheterization using a dynamic heart phantom simulated with the pulsatile liquid flow. Preclinical trials can then be conducted with all the components ready. Radiofrequency ablation will be conducted in a live porcine model, prepared with arrhythmia. If all the results are positive, we will approach the US FDA or other regulatory agencies to apply for conducting clinical trials on the equipment.

SLS-1 is currently in Lab-based Phantom Trial and it will follow the regulatory pathway for approval as indicated in the table in Page 74.

Aptorum Medical Limited - AML Clinic

Incorporated in August 2017, Aptorum Medical Limited is a Hong Kong-based company incorporated in Cayman Islands focused on delivering premium healthcare and clinic services. AML can draw on the expertise of many of the region's most experienced medical practitioners, and is committed to providing a comprehensive cross-functional facility for healthcare professionals to practice evidence-based medicine and offer high-quality medical services to their patients. We also intend that AML will offer to conduct clinical trials of both the Company's and third parties' new drug and device products.

Effective as of March 2018, we leased office space in Central, Hong Kong, the commercial and financial heart of Hong Kong, as the home to AML Clinic. We operate the AML Clinic under the name of Talem Medical. AML Clinic commenced operation in June 2018.

The recently renovated medical center is staffed by our group of medical professionals and offers state-of-the-art facilities. Initially we expect to focus our expertise on treatment of chronic diseases resulting from modern sedentary lifestyles and an aging population.

Natural supplement

NLS-2: DOI, a Bioactive Ingredient (DOI) in Chinese Yam for the Relief of Menopausal Symptoms as a Natural Supplement.

NativusWell® is a natural supplement made with the bioactive ingredient extracted Chinese yam powder containing "DOI", which is Aptorum Group's non-hormonal approach intended to meet certain growing consumer nutritional trends and concerns. It is estimated that 1.2 billion women worldwide will be menopausal or postmenopausal by the year 2030¹. The global woman's health supplement market for menopausal symptoms is projected to reach over USD\$50bn by 2025 with a CAGR rate of 16.4% (2016-2025)². Initially, the supplement will be commercialized and sold in Hong Kong; the Company is seeking regulatory clearance to market the product in other major jurisdictions.

As part of the commercialization, Aptorum Group, through its wholly-owned subsidiary Nativus Life Sciences Limited, entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products (the "Multipak Agreement"). Pursuant to the Multipak Agreement, Multipak is appointed as a non-exclusive distributor for the distribution and release of NativusWell®, yam powder tablets to be formulated according to proprietary technologies of Nativus and the Group in Hong Kong and China, and such other territories as agreed by both parties from time to time.

Through Multipak and other channels, Aptorum Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group's dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell®. The Multipak Agreement has a term of one year, which shall automatically renew for four additional one-year terms, unless terminated by either party with at least 30 days prior written notice. Either party may also terminate the Multipak Agreement upon written notice to the other party if such other party commits a material breach of the terms and conditions of the agreement and it is not remedied within 30 days' notice or if the other party cannot pay its debts or becomes insolvent, or otherwise is involved in a bankruptcy or liquidation proceeding. Nativus also has the option to terminate the agreement upon written notice to Multipak upon the occurrence of certain events, including: if Multipak is later by more than 30 days in paying amounts due under the agreement, Multipak challenges the validity of any of Nativus' or the Group's intellectual property, Multipak does something that could reasonably be expected to have an adverse effect on the reputation of Nativus or the Group, or Multipak has a change in control for which Nativus did not pre-approve. During the 3-month period following any termination (the "Sell-Off Period"), Multipak may sell of it stock of products, but may not return any, nor shall Nativus have any liability for breach of warranty for such product during the Sell-Off Period. At the end of Multipak Agreement also provides for certain indemnitees of each party.

The NativusWell® tablets are natural, non-hormonal supplements containing DOI. The yam powder with DOI utilizes a non-hormonal approach that is intended to boost the general wellness of women undergoing menopause. Third party scientific studies indicate that DOI, the naturally occurring bioactive ingredient in Chinese yam, appears to stimulate estradiol biosynthesis, induce estradiol and progesterone secretion and increase bone density, thereby potentially counteracting the progression of osteoporosis³, one of the common symptoms associated with menopause⁴.

Corporate History and Background

Aptorum was incorporated under the laws of the Cayman Islands on September 13, 2010. Our share capital is \$100,000,000.00 divided into 60,000,000 Class A Ordinary Shares with a nominal or par value of \$1.00 each and 40,000,000 Class B Ordinary Shares with a nominal or par value of \$1.00 each.

1 World Health Technical Report Series. Research on the Menopause in the 1990's. Geneva, Switzerland: World Health Organization; 1996.
2 <https://www.grandviewresearch.com/press-release/global-isoflavones-market>
3 <https://www.ke.hku.hk/story/innovation/the-magic-of-chinese-yam-for-treatment-of-menopausal-syndrome>; see also, Scientific Reports, 5-10179.
4 <https://www.everydayhealth.com/menopause/osteoporosis-and-menopause.aspx>

APTUS CAPITAL LIMITED, which has since been renamed to AENEAS CAPITAL LIMITED and which we refer to herein as Aeneas, was always under the direct ownership of Jurchen and not under the ownership chain of Aptorum Group. However, Aptus Asia Financial Holdings Limited ("AAFH"), which has since been renamed to Aeneas Group Limited, was transferred out of the Aptorum Group on November 10, 2017 to be held directly by Jurchen Investment Corporation and that subsequently, APTUS CAPITAL LIMITED was then transferred to be under AAFH.

On May 4, 2017, Mr. Huen transferred all of the ordinary shares in the Company he owned (in the amount of 22,307,596) to Jurchen, a company incorporated in the British Virgin Islands and wholly-owned by Mr. Huen. On October 13, 2017, as part of the Conversions (as defined below) the ordinary shares held by Jurchen were redesignated as 2,230,760 Class A Ordinary Shares and 20,076,836 Class B Ordinary Shares.

On February 21, 2017 the sole director of the Company and on March 1, 2017, the Company's board of directors and shareholders respectively, resolved to restructure the Company from an investment fund with management shares and non-voting participating redeemable preference shares to a holding company with operating subsidiaries, respectively (the "Restructuring Plan").

According to the Restructuring Plan, the 256,571.12 issued participating shares with par value of \$0.01 ("Participating Shares") were redeemed and 4,743,418.88 unissued Participating Shares were cancelled; following such redemption and cancellation, we no longer have any Participating Shares authorized or issued. Additionally, the Company authorized a class of shares consisting of 100,000,000 ordinary shares, par value \$1.00 per share ("Ordinary Shares") and issued 25,657,110 Ordinary Shares to our original investors.

During the period March 1, 2017 through October 13, 2017, an aggregate of 2,207,025 Ordinary Shares were issued at a price of approximately \$3.90 per share in a private placement we described as a "Series A" offering. Each investor of the Series A offering, in addition to a subscription agreement, signed a shareholder agreement, which set forth the basic governance terms of the Company, as well as our capital structure. The shareholders agreement was terminated in October 2017.

On October 13, 2017, ordinary resolutions were passed at an extraordinary general meeting of the Company approving (the "Conversions"): (i) converting 72,135,865 of authorized but unissued Ordinary Shares into 54,573,620 authorized but unissued Class A Ordinary Shares, par value of \$1.00 per share and 17,562,245 authorized but unissued Class B Ordinary Shares, par value of \$1.00 per share ("Class B Ordinary Shares"), respectively; (ii) converting 24,930,839 Ordinary Shares held by three shareholders into an aggregate of 2,493,085 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares; and (iii) converting 2,933,296 Ordinary Shares held by 24 shareholders into an aggregate 2,933,296 Class A Ordinary Shares. Following these issuances, we had 27 shareholders of record.

On October 19, 2017, we changed our name from APTUS Holdings Limited to our current name, Aptorum Group Limited.

On March 23, 2018, Jurchen transferred 446,152 Class A Ordinary Shares and 4,015,367 Class B Ordinary Shares to CGY Investments Limited, a company incorporated in Hong Kong and which we deem Mr. Darren Lui controls and/or of which he has substantial influence on the disposition rights and voting rights of such shares. Following this transfer, Jurchen owns approximately 33% and 72% of our Class A Ordinary Shares and Class B Ordinary Shares, respectively.

On December 17, 2018, the Company consummated its IPO of 761,419 Class A Ordinary Shares. The Registration Statement was declared effective by the U.S. Securities and Exchange Commission on December 3, 2018 (the "Effective Date"). The shares were sold at a price of \$15.80 per share, generating gross proceeds to the Company of approximately \$12,030,420. Immediately following the consummation of the IPO and automatic conversion of the Notes and Bonds, there were an aggregate of 6,537,269 Class A Ordinary Shares issued and outstanding.

On February 28, 2020, the Company consummated a Registered Direct Offering of 1,351,350 Class A Ordinary Shares and warrants to purchase up to 1,351,350 Class A Ordinary Shares. The shares were sold at a price of \$7.40 per share, generating gross proceeds to the Company of approximately \$10 million. The warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. Immediately following the consummation of the Registered Direct Offering, there were an aggregate of 7,948,712 Class A Ordinary Shares issued and outstanding.

Over the past three years, we have invested approximately \$9.9 million towards our principal capital expenditures, which include laboratory equipment, premises, leasehold improvements, and medical and other equipment.

Please see the chart illustrating our current corporate structure, under the heading of "Our Structure" in the Prospectus Summary, included earlier in this prospectus.

Intellectual Property

The technologies underlying our various research and development projects are the subject of various patents and patent applications claiming, in certain instances, composition of matter and, in other instances, methods of use. Prosecution, maintenance and enforcement of these patents, as well as those on any future protectable technologies we may acquire, are and will continue to be an important part of our strategy to develop and commercialize novel medicines and medical devices, as described in more detail below. Through entering into license agreements with their owners, we have obtained exclusive rights to these patents, applications and related know-how in the U.S. and certain other countries to develop, manufacture and commercialize the products using or incorporating the protected inventions that are described in this registration statement, of which this prospectus forms a part and that are expected to contribute significant value to our business. The technologies protected by these patents may also form the basis for the development of other products.

In addition to licensed intellectual property, our scientists have been actively developing our own proprietary intellectual property. No patent applications have yet been filed in the Company's own name for the Lead Projects. We have, however, filed a number of provisional applications to establish earlier filing dates for certain of our other ongoing researches, the specifics of which are currently proprietary and confidential.

The U.S. patent system permits the filing of provisional and non-provisional patent applications (i.e., a regular patent application). A non-provisional patent application is examined by the USPTO, and can mature into a patent once the USPTO determines that the claimed invention meets the standards for patentability. On the other hand, a provisional patent application is not examined for patentability, and automatically expires 12 months after its filing date. As a result, a provisional patent application cannot mature into a patent.

Provisional applications are often used, among other things, to establish an earlier filing date for a subsequent non-provisional patent application. The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained.

The effective filing date of a non-provisional patent application is used by the USPTO to determine what information is prior art when it considers the patentability of a claimed invention. If certain requirements are satisfied, a non-provisional patent application can claim the benefit of the filing date of an earlier filed provisional patent application. As a result, the filing date accorded by the provisional patent application may supersede information that otherwise could preclude the patentability of an invention.

A provisional patent application is not eligible to become an issued patent unless, among other things, we file a non-provisional patent application within 12 months of the filing date of the provisional patent application. If we do not timely file a non-provisional patent application claiming priority to said provisional application, we may lose our priority date with respect to our provisional patent applications. Further, if any (self or by others) publication of the invention is made after such priority date, and if we do not file a non-provisional application claiming priority to said provisional application, our invention may become unpatentable.

Moreover, we cannot predict whether such future patent applications will result in the issuance of patents that effectively protect any of our product candidates or will effectively prevent others from commercializing competitive products.

We do not expect to incur material expenses in the prosecution of the provisional applications or other licensed patent applications. We expect to fund the patent costs from our cash and restricted cash.

The value of our drug and device products will depend significantly on our ability to obtain and maintain patent and other proprietary protection for those products, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and proprietary rights of other parties.

As of the date hereof, we are the patentee of a number of provisional and non-provisional patent applications, both on our proprietary developed projects and improvement to our in-licensed projects.

The following table sets forth a list of our patent rights under the exclusive licenses as of the date of this prospectus related to our Lead Project, ALS-4; on the other hand, our other Lead Project, SACT-1 is a proprietary technology not subject to any license agreement:

Project Company / Project name	License Agreement	Licensors(s)	Licensee	Licensed / IP Rights	Patent Expiration Dates
Acticle / ALS-4	Exclusive Patent License Agreement, dated October 18, 2017	Versitech Limited	Acticle Life Sciences Limited	Exclusive licensee of: 1 U.S. patent (US10471045), 3 pending U.S. applications (16/041,838, US 16/679,313 and 16/867,540), 2 pending European applications (EP18835480.7 and EP18835238.9), 2 pending PRC application (CN201880048665.6 and 201880048674.5), 17 pending applications in other foreign jurisdictions including Australia, Brazil, Canada, Chile, Eurasia, Israel, Japan, Korea, Malaysia, New Zealand, Singapore	The licensed IP rights include granted patents in the U.S. and pending patent applications in the U.S., Europe, PRC and 11 other foreign jurisdictions.
	First Amendment to Exclusive License Agreement, dated June 7, 2018				The U.S. patent will expire in 2038; any other patent based on the pending application, if granted, will have a 20-year patent term from 2018.
	Second Amendment to Exclusive License Agreement dated July 10, 2019				
	Exclusive Patent License Agreement dated January 11, 2019				

Because of the extensive time required for clinical development and regulatory review of a drug we may develop, it is possible that, before any of our drug and device candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent. If appropriate, the Company may seek to extend the period during which it has exclusive rights to a product by pursuing patent term extensions and marketing exclusivity periods that are available from the regulatory authorities of certain countries (including the United States) and the EPO.

Even though the Company has certain patent rights, the ability to obtain and maintain protection of biotechnology and pharmaceutical products and processes such as those we intend to develop and commercialize involves complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in such patents has emerged to date in the U.S. The scope of patent protection outside the United States is even more uncertain. Changes in the patent laws or in interpretations of patent laws in the United States and other countries have diminished (and may further diminish) our ability to protect our inventions and enforce our IP rights and, more generally, could affect the value of IP.

While we have already secured rights to a number of issued patents directed to our drug candidates, we cannot predict the breadth of claims that may issue from the pending patent applications and provisional patents that we have licensed or that we have filed. Substantial scientific and commercial research has been conducted for many years in the areas in which we have focused our development efforts, which has resulted in other parties having a number of issued patents, provisional patents and pending patent applications relating to such areas. The patent examiner in any particular jurisdiction may take the view that prior issued patents and prior publications render our patent claims “obvious” and therefore unpatentable or require us to reduce the scope of the claims for which we are seeking patent protection.

In addition, patent applications in the United States and elsewhere generally are not available to the public until at least 18 months from the priority date, and the publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made. Therefore, patent applications relating to drugs and devices similar to our drug and device candidates may have already been filed, which (if they result in issued patents) could restrict or prohibit our ability to commercialize our drug and device candidates.

The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other IP rights. Our ability to prevent competition for our drug and device candidates and technologies will depend on our success in obtaining patents containing substantial and enforceable claims for those candidates and enforcing those claims once granted. With respect to any applications which have not yet resulted in issued patents, there can be no assurance that meaningful claims will be obtained. Even issued patents may be challenged or invalidated. If others have prepared and filed patent applications in the United States that also claim technology to which we have filed patent applications or otherwise wish to challenge our patents, we may have to participate in interferences, post-grant reviews, inter parties reviews, derivation or other proceedings in the USPTO and other patent offices to determine issues such as priority of claimed invention or validity of such patent applications as well as our own patent applications and issued patents. Patents may also be circumvented, and our competitors may be able to independently develop and commercialize similar drugs or mimic our technology, business model or strategy without infringing our patents. The rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar technology.

We may rely, in some limited circumstances, on unpatented trade secrets and know-how to protect aspects of our technology. However, it is challenging to monitor and prevent the disclosure of trade secrets. We seek to protect our proprietary trade secrets and know-how, in part, by entering into confidentiality agreements with consultants, scientific advisors and contractors and invention assignment agreements with our employees. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, giving our competitors knowledge of our trade secrets and know-how, and we may not have adequate remedies for any such breach, in which case our business could be adversely affected. Our trade secrets will not prevent our competitors from independently discovering or developing the same know-how. Although our agreements with our consultants, contractors or collaborators require them to provide us only original work product and prohibit them from incorporating or using IP owned by others in their work for us, if they breach these obligations, disputes may arise as to the rights in any know-how or inventions that arise from their work.

Our commercial success will also depend in part on not infringing the proprietary rights of other parties. Although we seek to review the patent landscape relevant to our technologies on an ongoing basis, we may become aware of a new patent which has been issued to others with claims covering or related to aspects of one of our drug or device candidate. The issuance of such a patent could require us to alter our development plans for that candidate, redesign the candidate, obtain a license from the patent holder or cease development. Our inability to obtain a license to proprietary rights that we may require to develop or commercialize any of our drug and device candidates would have a material adverse impact on us.

Trademarks

As of the date of this prospectus, we own trademark registrations covering the trade names and logos of Aptorum and our subsidiaries, including but not limited to "APTORUM", "APTORUM THERAPEUTICS," "VIDENS LIFE SCIENCES," "ACTICULE LIFE SCIENCES," "CLAVES LIFE SCIENCES", "NATIVUS LIFE SCIENCES", "TALEM," in jurisdictions Hong Kong, EU and the United Kingdom and PRC. Furthermore, we are in the process of applying for registration of trademarks in jurisdictions including the U.S. and PRC.

We also own certain unregistered trademark rights or have submitted applications for trademarks for our and our subsidiaries' trade names and logos.

All other trade names, trademarks and service marks of other companies appearing in this prospectus are the property of their respective holders. Solely for convenience, the trademarks and trade names in prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Important Advisors and Consultants to the Company

In addition to Company management, the following individuals provide the Company with significant advice and insight in their respective fields:

Scientific Advisory Board

We restructured the Scientific Assessment Committee into a newly formed Scientific Advisory Board. The Scientific Advisory Board shall help the Company sharpen its focus on innovation and technological advancements and address critical scientific challenges in our research and development; it will provide overall advice on the scientific development of the company. As of the date hereof, we have 26 members of the Board.

In light of the Company's focus on developing treatment for infectious diseases, we have established a second scientific advisory board, i.e., the Infectious Diseases Scientific Advisory Board in April 2020. As of the date hereof, the Infectious Diseases Scientific Advisory Board have 4 members.

DR. KEITH CHAN

The appointment of Dr. Chan is through a Consultancy Agreement by and between the Company and GloboAsia LLC, a firm based in Rockville, Maryland ("GloboAsia"), where Dr. Chan serves as Director of International Affairs.

Dr. Chan is currently a Senior Advisor of Cornerstone Intellectual Property Foundation in Taiwan. He is also serving as an adjunct professor at the Graduate Institute of Intellectual Property, College of Commerce, National Chengchi University and adjunct professor and advisor at the Research Center for Drug Discovery, National Yang Ming University in Taipei, Taiwan.

Dr. Chan co-founded GloboMax LLC, a drug development organization, in Hanover, Maryland, in July 1997, and served as a consultant for numerous multi-national pharmaceutical and biotech firms in the U.S, Europe and Asia. GloboMax LLC was acquired by ICON, plc, in August 2003, and Dr. Chan exited the operation. Prior to that, he joined the FDA in 1995 as a Director of Division of Bioequivalence, Office of Generic Drugs, responsible for managing and approval of generic drugs in the States. Dr. Chan had worked for Ciba-Geigy Corporation in Ardsley, New York, for 15 years, and held various senior and management positions. Dr. Chan also has extensive experience in new and generic drug development in executing preclinical animal studies, bioassay development, Phases I to VI Pharmacokinetics, pharmacodynamics, bioavailability, bioequivalence studies, outside contract, regulatory submission, advanced drug delivery systems, and all phases of new drug development. In addition, he has served as Professor/adjunct Professor at the School of Pharmacy, University of Maryland at Baltimore during 1996-2009 and also as Adjunct Professor and National Board of Advisor, College of Pharmacy, University of Minnesota during 1984 - 2006. He has published more than 150 abstracts and research articles in peer-reviewed journals and delivered over 200 professional presentations. He was elected as Fellow of the American Association of Pharmaceutical Scientists ("AAPS") in 1995 for his scientific accomplishments on drug absorption in humans.

Although much of his career was based in the United States, Dr. Chan has been assisting Asian pharmaceutical and biotech companies for over 14 years. He has organized numerous workshops and conferences in the PRC, Taiwan, Hong Kong, Singapore and Korea. He lectures frequently in Asia and serves as a scientific advisor for many regulatory agencies in Asia. Over the last several years, he has successfully assisted many Asian companies in their technology transfers and licensing deals to and from the U.S., as well as with numerous regulatory submissions to the FDA.

Dr. Chan obtained his Ph.D. degree in Pharmaceutics from the University of Minnesota in January 1980.

DR. ROBBIE MAJZNER

In addition to serving on the Scientific Advisory Board, Dr. Majzner will provide specific scientific advice and support for certain targeted clinical development aspects of our repurposed drug candidate SACT-1.

Dr. Majzner is an Assistant Professor of Pediatrics in the Division of Hematology and Oncology at the Stanford University Medical Center. Prior to joining Stanford, he worked in the laboratory of Dr. Crystal Mackall at the National Cancer Institute. His research interests lie in the optimization of chimeric antigen receptor (CAR) T cell therapies for sarcomas and other solid tumors. Dr. Majzner received his M.D. from Harvard Medical School, and completed his pediatric residency at Columbia University and fellowship in pediatric hematology-oncology at the joint program of Johns Hopkins University and the National Cancer Institute.

*Senior Medical Advisor and CEO of Claves Life Sciences Limited***DR. HERMAN WEISS, M.D.**

Dr. Herman Weiss, M.D., has been appointed as our senior medical advisor and also the Chief Executive Officer and Executive Director of one of our wholly owned subsidiaries, Claves Life Sciences Limited ("Claves"). Claves is focused on microbiome-based approach to metabolic diseases. Dr. Weiss will be leading the development of Claves' business and drive Claves' microbiome-based research platform for treatments of metabolic diseases, and potentially other indications, to targeted clinical stages.

Dr. Weiss has over 20 years of experience in the medical field. He is currently a Physician at Maccabi and Meuchedet Kuppot Health System and Chairman of the Board of Directors of Todos Medical in Israel. Dr. Weiss previously held senior roles at both Juniper Pharmaceuticals, as Head of Clinical Development and Medical Affairs, and at Teva Pharmaceuticals, as Global Medical Director. He has also consulted for various medical device and biotech companies. He owns multiple patents and is the author of numerous publications in the area of women's health/gynecology. Dr. Weiss received his MBA from the George Washington University, his M.D. from the Ohio State University College of Medicine and his B.A. from Ramapo College of New Jersey.

*Senior Strategic Consultant***DR. KIRA SHEINERMAN**

Dr. Kira Sheinerman is the co-founder, CEO and Executive Director of Diamir Biosciences, a molecular diagnostics company focused on developing blood-based tests for early detection and monitoring of brain health conditions. Dr. Sheinerman also serves as a Managing Director, Healthcare Investment Banking at H.C. Wainwright & Co. Previously, she was a Managing Director at Rodman & Renshaw, where she worked on financial and strategic transactions for growth biotech companies with a focus on CNS, oncology, and infectious diseases, as well as molecular diagnostics. Prior to healthcare investment banking, Dr. Sheinerman worked at the Arcus group, a life sciences strategic consulting firm. She is a board member of the Boyce Thompson Institute, an affiliate of Cornell University. Dr. Sheinerman received her Ph.D. in Biomedical Sciences from the Mount Sinai School of Medicine in New York for her work on molecular mechanisms of Alzheimer's disease. She also holds an MBA from the Honors program at the Zicklin School of Business, Baruch College, City University of New York.

*Senior Clinical Advisor of Aptorum Therapeutics Limited***DR. NISHANT AGRAWAL**

Dr. Agrawal, MD, has been serving as the Director of Head and Neck Surgical Oncology, and Professor of Surgery at The University of Chicago School of Medicine since October 2015. He is specialized in management of patients with benign and malignant tumors of the head and neck, and has been practicing Otolaryngology - Head and Neck Surgery, at The University of Chicago Medicine, and Center for Advanced Medicine, both in Chicago since 2009.

Dr. Agrawal's work has achieved international recognition in the field of head and neck surgical oncology, as well as head and neck cancer genetics. Under his leadership, a team of researchers completed a landmark study that examined the genome of head and neck squamous cell carcinoma. His team has published extensively in the genomic landscapes of major head and neck cancers, including esophageal squamous cell carcinoma, esophageal adenocarcinoma, medullary thyroid cancer, adenoid cystic carcinoma, and mucoepidermoid carcinoma. Dr. Agrawal then applied these findings to identify tumor DNA as a biomarker that improves cancer diagnostics in the saliva and plasma of patients with head and neck squamous cell carcinoma. His researches focus on the application of cancer genetics to design diagnostic approaches to reduce morbidity and mortality from head and neck cancer.

In addition to his clinical and research contributions, Dr. Agrawal is an accomplished educator-teaching medical students, residents, and fellows about the management of patients with head and neck cancer. Prior to joining the University of Chicago, Dr. Agrawal was an associate professor at Johns Hopkins University, where he completed his medical training in 2001, followed by internship and residency.

In addition, Dr. Agrawal was granted fellowships from the Memorial Sloan Kettering Cancer Center, New York (Head and Neck Surgical Oncology), and from Johns Hopkins University School of Medicine, Baltimore (Molecular Genetics). He holds numerous Memberships from accredited American medical associations and institutions.

Specifically, as a Senior Clinical Advisor, Dr. Agrawal supports our efforts to identify, develop and commercialize novel therapies for patients and the healthcare industry. He provides a diverse collection of academic, industrial and regulatory expertise.

Competition

Our industry is highly competitive and subject to rapid and significant change. While we believe that our development and commercialization experience, scientific knowledge and industry relationships provide us with competitive advantages, we face competition from pharmaceutical and biotechnology companies, including specialty pharmaceutical companies, and generic drug companies, academic institutions, government agencies and research institutions.

There are a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of drugs and devices for the diagnosis and treatment of diseases for which we are developing products or technology. Moreover, a number of additional drugs are currently in clinical trials and may become competitors if and when they receive regulatory approval.

Many of our competitors have longer operating histories, better name recognition, stronger management capabilities, better supplier relationships, a larger technical staff and sales force and greater financial, technical or marketing resources than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Our commercial opportunity could be reduced or eliminated if our competitors develop or market products or other novel therapies that are more effective, safer or less costly than our current drug candidates, or any future drug candidates we may develop, or obtain regulatory approval for their products more rapidly than we may obtain approval for our current drug candidates or any such future drug candidates. Our success will be based in part on our ability to identify, develop and manage a portfolio of drug and device candidates that are safer and more effective than competing products.

Regulation

Government authorities in the United States at the federal, state and local level and in other countries extensively regulate, among other things, the research and clinical development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing, pricing, export and import of drug and device products ("Regulated Products"), such as those we are developing. Generally, before a new Regulated Product can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized to address the requirements of and in the format specific to each regulatory authority, submitted for review and approved by the regulatory authority. This process is very lengthy and expensive, and success is uncertain.

Regulated Products are also subject to other federal, state and local statutes and regulations in the United States and other countries, as applicable. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable regulatory requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the regulatory authority's refusal to approve pending applications, withdrawal of an approval, clinical holds, untitled or warning letters, voluntary product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, injunctions, disbarment, fines, refusals of government contracts, restitution, disgorgement, or civil or criminal penalties. Any such administrative or judicial enforcement action could have a material adverse effect on us.

As AML Clinic and part of the Company's operation are located in Hong Kong, the Company is subject to various Hong Kong laws and regulation covering its business activities there, described in further detail below. Also, the Company anticipates that, if it obtains marketing approval for any of its drug and device candidates, it intends to focus its marketing and sales efforts primarily in three regions: the United States, Europe and PRC. The regulatory framework for each of these regions is described below.

U.S. Drug Development Process

The process of obtaining regulatory approvals and maintaining compliance with appropriate federal, state and local statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process, or after approval, may subject an applicant to administrative or judicial sanctions or lead to voluntary product recalls. Administrative or judicial sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of non-clinical laboratory tests, preclinical studies according to cGLP and manufacturing of clinical supplies according to cGMP;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent IRB, at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials according to cGCP, to establish the safety and efficacy of the proposed product for its intended use;
- preparation and submission to the FDA of an NDA, for a drug;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with cGMP; and
- payment of user fees and the FDA review and approval of the NDA.

Devices are subject to different forms of testing and approval, but (except for certain laboratory-developed diagnostic tests) still require satisfaction of various FDA requirements in order to be brought to market. As of the date hereof, the device candidate currently under development is SLS-1. We do not currently have a commercialization timeline for SLS-1 and cannot assure you that SLS-1 will ever be ready for commercialization.

The testing and approval process requires substantial time, effort and financial resources and we cannot be certain that any approvals for our drug candidates, or any future drug candidates we may develop, will be granted on a timely basis, if at all.

Once a drug candidate is identified for development, it enters the non-clinical testing stage. Non-clinical tests include laboratory evaluations of product chemistry, toxicity, formulation and stability, as well as preclinical studies. An IND sponsor must submit the results of the non-clinical tests, together with manufacturing information, analytical data and any available clinical data or literature, to the FDA as part of the IND prior to commencing any testing in humans. An IND sponsor must also include a protocol detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated if the initial clinical trial lends itself to an efficacy evaluation. Some non-clinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions related to a proposed clinical trial and places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns or non-compliance, and may be imposed on all products within a certain class of products. The FDA also can impose partial clinical holds, for example, prohibiting the initiation of clinical trials for certain duration or for certain doses.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with cGCP regulations. These regulations include the requirement that all research subjects provide informed consent in writing before their participation in any clinical trial. Further, an IRB representing each institution participating in a clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review and reapprove the study at least annually. An IRB is responsible for protecting the rights of clinical trial subjects and considers, among other things, whether the risks to individuals participating in the clinical trial are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the clinical trial and the consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Each new clinical protocol and any amendments to the protocol must be submitted to the FDA for review, and to the IRBs for approval. Protocol detail, among other things, includes the objectives of the clinical trial, testing procedures, sublease selection and exclusion criteria, and the parameters to be used to monitor subject safety.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- **Phase 1.** Phase 1 includes the initial introduction of an investigational new drug into humans. These studies are closely monitored and may be conducted in patients, but are usually conducted in healthy volunteer subjects. These studies are designed to determine the metabolic and pharmacologic actions of the drug in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness. During Phase 1, sufficient information about the drug's pharmacokinetics and pharmacological effects should be obtained to permit the design of well-controlled, scientifically valid, Phase 2 studies. Phase 1 studies also evaluate drug metabolism, structure-activity relationships, and the mechanism of action in humans. These studies also determine which investigational drugs are used as research tools to explore biological phenomena or disease processes. The total number of subjects included in Phase 1 studies varies with the drug, but is generally in the range of twenty to eighty.
- **Phase 2.** Phase 2 includes the early controlled clinical studies conducted to obtain some preliminary data on the effectiveness of the drug for a particular indication or indications in patients with the disease or condition. This phase of testing also helps determine the common short-term side effects and risks associated with the drug. Phase 2 studies are typically well-controlled, closely monitored, and conducted in a relatively small number of patients, usually involving several hundred people.
- **Phase 3.** Phase 3 studies are expanded controlled and uncontrolled trials. They are performed after preliminary evidence suggesting effectiveness of the drug has been obtained in Phase 2, and are intended to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug. Phase 3 studies are designed to provide an adequate basis for extrapolating the results to the general population and transmitting that information in the physician labeling. Phase 3 studies usually include several hundred to several thousand people.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and clinical investigators within 15 calendar days for serious and unexpected suspected adverse events, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator's brochure, or any findings from other studies or animal or in vitro testing that suggest a significant risk in humans exposed to the drug candidate. Additionally, a sponsor must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction no later than 7 calendar days after the sponsor's receipt of the information. There is no assurance that Phase 1, Phase 2 and Phase 3 testing can be completed successfully within any specified period, or at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product has been associated with unexpected serious harm to subjects.

Concurrent with clinical trials, companies usually complete additional preclinical studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product drug and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product drug does not undergo unacceptable deterioration over its shelf life.

The results of product development, non-clinical studies and clinical trials, together with other detailed information regarding the manufacturing process, analytical tests conducted on the product, proposed labeling and other relevant information, are submitted to the FDA as part of an NDA requesting approval to market the new drug. The FDA reviews all NDAs submitted within 60 days of submission to ensure that they are sufficiently complete for substantive review before it accepts them for filing. If the submission is accepted for filing, the FDA begins an in-depth substantive review.

The approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive, and the FDA may interpret data differently than we interpret the same data. The FDA will issue a complete response letter if the agency decides not to approve the NDA in its present form. The complete response letter usually describes all of the specific deficiencies that the FDA identified in the NDA that must be satisfactorily addressed before it can be approved. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application or request an opportunity for a hearing.

If after such review a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. Any products for which we receive the FDA approval would be subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with the FDA promotion and advertising requirements. In addition, the FDA may require post-approval studies, including Phase 4 clinical trials, to further assess a product's safety and effectiveness after NDA approval and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized. The FDA also may conclude that an NDA may only be approved with a Risk Evaluation and Mitigation Strategy designed to mitigate risks through, for example, a medication guide, physician communication plan, or other elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

Post-Approval Requirements

Any products for which we receive the FDA approval are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with the FDA promotion and advertising requirements. The FDA strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. Further, manufacturers must continue to comply with cGMP requirements, which are extensive and require considerable time, resources and ongoing investment to ensure compliance. In addition, changes to the manufacturing process generally require prior the FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further the FDA review and approval.

The FDA may withdraw a product approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product's marketing or even complete withdrawal of the product from the market. Further, the failure to maintain compliance with regulatory requirements may result in administrative or judicial actions, such as fines, untitled or warning letters, holds on clinical trials, product seizures, product detention or refusal to permit the import or export of products, refusal to approve pending applications or supplements, restrictions on marketing or manufacturing, injunctions or consent decrees, or civil or criminal penalties, or may lead to voluntary product recalls.

Patent Term Restoration and Marketing Exclusivity

Because drug approval can take an extended period of time, there may be limited remaining life for the patents covering the approved drug, meaning that the company has limited time to use the patents to protect the sponsor's exclusive rights to make, use and sell that drug. In such a case, U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date.

In addition, the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application ("ANDA") or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval.

In the future, if appropriate, we intend to apply for restorations of patent term and/or marketing exclusivity for some of our products; however, there can be no assurance that any such extension or exclusivity will be granted to us.

Disclosure of Clinical Trial Information

Sponsors of clinical trials of the FDA-regulated products, including drugs are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Pharmaceutical Coverage, Pricing and Reimbursement

Much of the revenue generated by new Regulated Products depends on the willingness of third-party payors to reimburse the price of the product. Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. In the United States, sales of any products for which we may receive regulatory approval for commercial sale will depend in part on the availability of coverage and reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list, or formulary, which is not required to include all of the FDA-approved products for a particular indication. Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. To obtain coverage and reimbursement for any product that might be approved for sale, we may need to conduct extensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of any products, in addition to the costs required to obtain regulatory approvals. Our product candidates may not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

The U.S. government and state legislatures have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. Adoption of government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Unfavorable coverage or reimbursement policies regarding any of the Company's products would have a material adverse impact on the value of that product.

Other Healthcare Laws and Compliance Requirements

If we obtain regulatory approval of our products, we may be subject to various federal and state laws targeting fraud and abuse in the healthcare industry. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business.

Patient Protection and the Affordable Care Act

The Affordable Care Act, enacted in March 2010, includes measures that have or will significantly change the way health care is financed in the United States by both governmental and private insurers. Among the provisions of the Affordable Care Act of greatest importance to the pharmaceutical industry are the following:

- The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. The Affordable Care Act increased pharmaceutical manufacturers' rebate liability on most branded prescription drugs from 15.1% of the average manufacturer price to 23.1% of the average manufacturer price, added a new rebate calculation for line extensions of solid oral dosage forms of branded products, and modified the statutory definition of average manufacturer price. The Affordable Care Act also expanded the universe of Medicaid utilization subject to drug rebates by requiring pharmaceutical manufacturers to pay rebates on Medicaid managed care utilization and expanding the population potentially eligible for Medicaid drug benefits.
- In order for a pharmaceutical product to receive federal reimbursement under the Medicare Part B and Medicaid programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The Affordable Care Act expanded the types of entities eligible to receive discounted 340B pricing.

- The Affordable Care Act imposed a requirement on manufacturers of branded drugs to provide a 50% discount off the negotiated price of branded drugs dispensed to Medicare Part D patients in the coverage gap (i.e., the “donut hole”).
- The Affordable Care Act imposed an annual, non-deductible fee on any entity that manufactures or imports certain branded prescription drugs, apportioned among these entities according to their market share in certain government healthcare programs, although this fee does not apply to sales of certain products approved exclusively for orphan indications.

In addition to these provisions, the Affordable Care Act established a number of bodies whose work may have a future impact on the market for certain pharmaceutical products. These include the Patient-Centered Outcomes Research Institute, established to oversee, identify priorities in, and conduct comparative clinical effectiveness research, the Independent Payment Advisory Board, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program, and the Center for Medicare and Medicaid Innovation within the Centers for Medicare and Medicaid Services, to test innovative payment and service delivery models to lower Medicare and Medicaid spending.

These and other laws may result in additional reductions in healthcare funding, which could have a material adverse effect on customers for our product candidates, if we gain approval for any of them. Although we cannot predict the full effect on our business of the implementation of existing legislation or the enactment of additional legislation pursuant to healthcare and other legislative reform, we believe that legislation or regulations that would reduce reimbursement for, or restrict coverage of, our products could adversely affect how much or under what circumstances healthcare providers will use our product candidates if we gain approval for any of them.

U.S. Medical Device Regulatory Approval Process

Medical Devices are subject to different forms of testing and approval, and require satisfaction of various FDA requirements including the Food, Drug and Cosmetic Act (FDCA) in order to be brought to market.

The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval. The type of marketing authorization is generally linked to the classification of the device. The FDA classifies medical devices into one of three classes — Class I, Class II or Class III — based on the degree of risk the FDA determines to be associated with a device and the level of regulatory control deemed necessary to ensure the device's safety and effectiveness. Devices requiring fewer controls because they are deemed to pose lower risk are placed in Class I or II. Class I devices are deemed to pose the least risk and are subject only to general controls applicable to all devices, such as requirements for device labeling, premarket notification, and adherence to the FDA's Good Manufacturing Practices. Class II devices are intermediate risk devices that are subject to general controls and may also be subject to special controls such as performance standards, product-specific guidance documents, special labeling requirements, patient registries, or post-market surveillance. Class III devices are those for which insufficient information exists to assure safety and effectiveness solely through general controls or if the device is a life-sustaining, life-supporting or a device of substantial importance in preventing impairment of human health, or which presents a potential, unreasonable risk of illness or injury and special controls are not adequate to assure safety and effectiveness.

Most Class I devices and some Class II devices are exempted by regulation from the 510(k) clearance requirement and can be marketed without prior authorization from the FDA. Most Class II devices (and certain Class I devices that are not exempt) are eligible for marketing through the 510(k) clearance pathway. By contrast, devices placed in Class III generally require premarket approval or 510(k) de novo clearance prior to commercial marketing. The premarket approval process is more stringent, time-consuming, and expensive than the 510(k) clearance process. However, the 510(k) clearance process has also become increasingly stringent and expensive.

510(k) Clearance Pathway. When a 510(k) clearance is required, a premarket notification must be submitted to the FDA demonstrating that a proposed device is “substantially equivalent” to a previously cleared and legally marketed 510(k) device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for the submission of a premarket approval application, which is commonly known as the “predicate device.” A device is substantially equivalent if, with respect to the predicate device, it has the same intended use and has either (i) the same technological characteristics or (ii) different technological characteristics and the information submitted demonstrates that the device is as safe and effective as a legally marketed device and does not raise different questions of safety or effectiveness. By law, the FDA is required to clear or deny a 510(k) premarket notification within 90 days of submission of the application. As a practical matter, clearance often takes significantly longer. The FDA may require further information, including clinical data, to make a determination regarding substantial equivalence. If the FDA determines that the device, or its intended use, is not substantially equivalent to a previously-cleared device or use, the FDA will issue a not substantially equivalent decision. This means the device cannot be cleared through the 510k process and will require marketing authorization through the premarket approval pathway.

Premarket Approval Pathway. A premarket approval application must be submitted to the FDA if the device cannot be cleared through the 510(k) process. The premarket approval application process is much more demanding than the 510(k) premarket notification process and requires the payment of significant user fees. A premarket approval application must be supported by valid scientific evidence, which typically requires extensive data, including but not limited to technical, preclinical, clinical trials, manufacturing and labeling to demonstrate to the FDA's satisfaction reasonable evidence of safety and effectiveness of the device. The FDA has 45 days from its receipt of a premarket approval application to determine whether the application will be accepted for filing based on the FDA's threshold determination that it is sufficiently complete to permit substantive review. After the FDA determines that the application is sufficiently complete to permit a substantive review, the FDA will accept the application and begin its in-depth review. The FDA has 180 days to review an “accepted” premarket approval application, although this process typically takes significantly longer and may require several years to complete. During this review period, the FDA may request additional information or clarification of the information already provided. Also, an advisory panel of experts from outside the FDA may be convened to review and evaluate the application and provide recommendations to the FDA as to the approvability of the device. In addition, the FDA will conduct a preapproval inspection of the manufacturing facility to ensure compliance with quality system regulations. The FDA may delay, limit or deny approval of a premarket approval application for many reasons, including:

- failure of the applicant to demonstrate that there is reasonable assurance that the medical device is safe or effective under the conditions of use prescribed, recommended or suggested in the proposed labeling;
- insufficient data from the preclinical studies and clinical trials;
- the manufacturing processes, methods, controls or facilities used for the manufacture, processing, packing or installation of the device do not meet applicable requirements. If the FDA evaluations of both the premarket approval application and the manufacturing facilities are favorable, the FDA will either issue an approval order or an approvable letter, which usually contains a number of conditions that must be met in order to secure final approval of the premarket approval application. If the FDA's evaluation of the premarket approval application or manufacturing facilities is not favorable, the FDA will deny approval of the premarket approval application or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the premarket approval application. The FDA may also determine that additional clinical trials are necessary, in which case the premarket approval application may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the premarket approval application. Once granted, a premarket approval application may be withdrawn by the FDA if compliance with post approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

Clinical Trials. Clinical trials are almost always required to support premarket approval and are sometimes required for 510(k) clearance. In the United States, these trials generally require submission of an application for an Investigational Device Exemption, or IDE, to the FDA. The IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing it is safe to test the device in humans and that the testing protocol is scientifically sound. The FDA must approve the IDE in advance of trials for a specific number of patients unless the product is deemed a non-significant risk device eligible for more abbreviated IDE requirements or the clinical investigation is exempt from the IDE regulations. Clinical trials for significant risk devices may not begin until the IDE application is approved by the FDA and the appropriate institutional review boards, or IRBs, at the clinical trial sites. The applicant, the FDA or the IRB at each site at which a clinical trial is being performed may suspend a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the benefits. Even if a trial is completed, the results of clinical testing may not demonstrate the safety and efficacy of the device, may be equivocal or may otherwise not be sufficient to obtain approval or clearance of the product.

Both the 510(k) and premarket approval processes can be expensive and lengthy and require the payment of significant fees, unless an exemption applies. The FDA's 510(k) clearance process usually takes from approximately three to 12 months, but may take longer. The process of obtaining a premarket approval is much more costly and uncertain than the 510(k) clearance process and generally takes from approximately one to five years, or longer, from the time the application is submitted to the FDA until an approval is obtained. The process of obtaining regulatory clearances or approvals to market a medical device can be costly and time consuming, and the applicant may not be able to obtain these clearances or approvals on a timely basis, if at all.

As of the date hereof, our sole device candidate currently under development is SLS-1, which is a platform for the dexterous manipulation of cardiovascular robotic surgical catheter, conventionally classified as a cardiovascular steerable catheter, in the MRI environment. We do not currently have a commercialization timeline for SLS-1 and cannot assure you that SLS-1 will ever be ready for commercialization. If we are ready to seek regulatory approval for the SLS-1 device in the U.S., we expect that the FDA will classify it as a Class II non-exempted device requiring premarket clearance under Section 510(k) of the FDCA. If our device cannot clear through the 510(k) process, we will need to obtain marketing authorization through the premarket approval pathway, which will be more costly, lengthy and uncertain.

European Union Regulation

Regulation in the European Union

The process governing approval of medicinal products in the EU generally follows the same lines as in the United States. It entails satisfactory completion of pharmaceutical development, non-clinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the medicinal product for each proposed indication. It also requires the submission to relevant competent authorities for clinical trials authorization and to the European Medicines Authority, or EMA, for a marketing authorization application, or MAA, and granting of a marketing authorization by these authorities before the product can be marketed and sold in the EU.

Clinical Trial Approval

Pursuant to the currently applicable Clinical Trials Directive 2001/20/EC and the Directive 2005/28/EC on cGCP, a system for the approval of clinical trials in the EU (the equivalent of the IND process in the United States) has been implemented through national legislation of the EU member states. Under this system, an applicant must obtain approval from the competent national authority of an EU member state in which the clinical trial is to be conducted or in multiple EU member states if the clinical trial is to be conducted in a number of EU member states. Furthermore, the applicant may only start a clinical trial at a specific study site after the independent ethics committee has issued a favorable opinion. The clinical trial application, or CTA, must be accompanied by an investigational medicinal product dossier with supporting information prescribed by Directive 2001/20/EC and Directive 2005/28/EC and corresponding national laws of the EU member states and further detailed in applicable guidance documents.

In April 2014, the EU adopted a new Clinical Trials Regulation (EU) No 536/2014, which is set to replace the current Clinical Trials Directive 2001/20/EC. It is expected that the new Clinical Trials Regulation will apply in 2019. It will overhaul the current system of approvals for clinical trials in the EU. Specifically, the new regulation, which will be directly applicable in all EU member states, aims at simplifying and streamlining the approval of clinical trials in the EU. For instance, the new Clinical Trials Regulation provides for a streamlined application procedure using a single entry point and strictly defined deadlines for the assessment of clinical trial applications.

Marketing Authorization

To obtain a marketing authorization for a product under the EU regulatory system (the equivalent of the NDA process in the United States), an applicant must submit an MAA, either under a centralized procedure administered by the EMA or one of the procedures administered by competent authorities in EU member states (decentralized procedure, national procedure, or mutual recognition procedure). A marketing authorization may be granted only to an applicant established in the EU. Regulation (EC) No. 1901/2006 provides that prior to obtaining a marketing authorization in the EU, an applicant must demonstrate compliance with all measures included in an EMA-approved Pediatric Investigation Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted a product-specific waiver, class waiver, or a deferral for one or more of the measures included in the PIP.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all EU member states. Pursuant to Regulation (EC) No. 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy products and products with a new active substance indicated for the treatment of certain diseases, including products for the treatment of cancer. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or the CHMP, established by the EMA is responsible for conducting the assessment of a product to define its risk/benefit profile. Under the centralized procedure, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated evaluation may be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and, in particular, from the viewpoint of therapeutic innovation.

If the CHMP accepts such a request, the time limit of 210 days will be reduced to 150 days, but it is possible that the CHMP may revert to the standard time limit for the centralized procedure if it determines that it is no longer appropriate to conduct an accelerated assessment.

Periods of Authorization and Renewals

A marketing authorization is valid for five years, in principle, and it may be renewed after five years on the basis of a reevaluation of the risk benefit balance by the EMA or by the competent authority of the authorizing Member State. To that end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal period. Any authorization that is not followed by the placement of the drug on the EU market (in the case of the centralized procedure) or on the market of the authorizing Member State within three years after authorization ceases to be valid.

Regulatory Requirements after Marketing Authorization

Following approval, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of the medicinal product. These include compliance with the EU's stringent pharmacovigilance or safety reporting rules, pursuant to which post-authorization studies and additional monitoring obligations can be imposed. In addition, the manufacturing of authorized products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the EMA's cGMP requirements and comparable requirements of other regulatory bodies in the EU, which mandate the methods, facilities and controls used in manufacturing, processing and packing of drugs to assure their safety and identity. Finally, the marketing and promotion of authorized products, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the EU under Directive 2001/83EC, as amended.

Orphan Drug Designation and Exclusivity

Regulation (EC) No. 141/2000 and Regulation (EC) No. 847/2000 provide that a product can be designated as an orphan drug by the European Commission if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of (1) a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the EU when the application is made, or (2) a life-threatening, seriously debilitating or serious and chronic condition in the EU and that without incentives it is unlikely that the marketing of the drug in the EU would generate sufficient return to justify the necessary investment. For either of these conditions, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention, or treatment of the condition in question that has been authorized in the EU or, if such method exists, the drug has to be of significant benefit compared to products available for the condition.

An orphan drug designation provides a number of benefits, including fee reductions, regulatory assistance and the possibility to apply for a centralized EU marketing authorization. Marketing authorization for an orphan drug leads to a ten-year period of market exclusivity. During this market exclusivity period, neither the EMA nor the European Commission or the EU member states can accept an application or grant a marketing authorization for a "similar medicinal product." A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. The market exclusivity period for the authorized therapeutic indication may, however, be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan drug designation because, for example, the product is sufficiently profitable not to justify market exclusivity.

European Medical Device Regulatory Approval Process

As in the United States, there is a separate regulatory framework for approval of medical devices. If the Company determines to commercialize SLS-1 or another medical device, it will become subject to all of the requirements for approval required by those regulations.

PRC Regulation

In order to protect our potential market in the PRC, we have obtained an exclusive license of certain PRC patents directed to certain of the drug candidates that we are developing and are currently seeking approval of additional patent and other IP filings in the PRC. We do not otherwise conduct business in the PRC. Seeking IP approval in the PRC subjects us to some of the rules and practices of the PRC government. Since the Company intends eventually to market its products in the PRC, at least some of our drug candidates may become subject to regulatory approval and marketing authorization in the PRC.

Hong Kong Regulation

The operations of AML Clinic in Hong Kong are subject to certain general laws and regulations in relation to clinic medical professionals, trade description and safety of consumer goods, medical advertisement and importation, exportation, dealing in and sale of pharmaceutical products and drugs.

Medical Clinics Ordinance

The Medical Clinics Ordinance provides for the registration, control and inspection of medical clinics. It requires a medical clinic to be registered, with name and address and other prescribed particulars. "Medical clinic" means any premises used or intended to be used for the medical diagnosis or treatment of persons suffering from, or believed to be suffering from, any disease, injury or disability of mind or body, with specific exceptions, including private consulting rooms used exclusively by registered medical practitioners in the course of their practice on their own account and not bearing any title or description which includes the word "clinic" or "polyclinic" in the English language.

The application of registration may be refused if:

- (i) the income derived or to be derived from the establishment or operation of the clinic is not, or will not be, applied solely towards the promotion of the objects of the clinic; or
- (ii) any portion of such income, except payment of remuneration to employed registered medical practitioners, nurses and menial servants, will be paid by way of dividend, bonus or otherwise howsoever by way of profit to the applicant himself, or to any persons properly so employed, or to any other persons howsoever.

We do not believe that the Medical Clinic Ordinance is applicable to the business of our Company and its subsidiaries, having considered, among others, the following:

- (iii) the legislative intent behind the Medical Clinics Ordinance was to provide for registration of non-profit making clinics;
 - (iv) the Food and Health Bureau of Hong Kong published a consultation document, "Regulation of Private Healthcare Facilities" in 2014 which specifically states that the Medical Clinics Ordinance and the Code of Practice For Clinics Registered Under The Medical Clinics Ordinance (Chapter 343 of the Laws of Hong Kong) set out the regulatory framework for non-profit-making medical clinics and that other private healthcare facilities, such as ambulatory medical centers and clinics operated by medical groups or individual medical practitioners, are not subject to direct statutory control beyond the regulation of an individual's professional practice; and
 - (v) our business is one which makes and intends to continue making profit as a listed entity. The payment of bonuses to some of our Hong Kong Doctors is clearly a reflection of the profit-making nature of our business.
- Hence, we do not believe that AML Clinic is required to be registered under the Medical Clinics Ordinance.

Waste Disposal Ordinance

The Waste Disposal Ordinance (Chapter 354 of the Laws of Hong Kong) ("WDO") and the Waste Disposal (Clinical Waste) (General) Regulation (Chapter 354O of the Laws of Hong Kong) (the "WDR") provide for, among others, the control and regulation of the production, storage, collection and disposal of clinical waste.

Under the WDO, clinical waste means waste consisting of any substance, matter or thing generated in connection with:

- a dental, medical, nursing or veterinary practice;
- any other practice, or establishment (howsoever described), that provides medical care and services for the sick, injured, infirm or those who require medical treatment;
- dental, medical, nursing, veterinary, pathological or pharmaceutical research; or
- a dental, medical, veterinary or pathological laboratory practice,

and which consists wholly or partly of any of the materials specified in one or more of the groups listed below:

- used or contaminated sharps;
- laboratory waste;
- human and animal tissues;
- infectious materials;
- dressings; and
- such other wastes as specified by the Director of the Environmental Protection Department ("EPD") of Hong Kong.

Given the medical services provided by AML Clinic and the research works in our R&D Center may produce used or contaminated sharps such as syringes and needles as well as dressings, we are subject to WDO, WDR and the Code of Practice.

Public Health and Municipal Services Ordinance

We intend to first launch and market NativusWell® (NLS-2) in Hong Kong. In Hong Kong, natural supplements are defined as "health food" products. "Health food" containing medicines are subject to the Pharmacy and Poisons Ordinance (Cap 138) and such "health food" containing Chinese medicines are regulated by the Chinese Medicine Ordinance (Cap 549), where they must meet the requirements in respect of safety, quality and efficacy before they can be registered.

For other "health food" products which cannot be classified as Chinese medicine or western medicine are regulated under the Public Health and Municipal Services Ordinance (Cap 132) as general food products. The Public Health and Municipal Services Ordinance requires the manufacturers and sellers of food to ensure that their products are fit for human consumption and comply with the requirements in respect of food safety, food standards and labelling. In addition, all prepackaged food should bear labels which correctly list out the ingredients of the food under the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) under the Ordinance.

The NativusWell® (NLS-2) is made with the bioactive ingredient extracted Chinese yam powder and does not contain any western or Chinese medicine; therefore, registration is not required under the local laws for marketing in Hong Kong. We will, however, ensure the compliance of the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) with by proper labelling in place.

Rest of the World Regulation

For other countries in the world, the requirements governing the conduct of clinical trials, medical product licensing, pricing and reimbursement vary from country to country. In all cases if clinical trials are required, they must be conducted in accordance with cGCP requirements and the applicable regulatory requirements and the ethical principles having their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Employees

As of the date hereof, we have 39 employees, including 35 full-time employees and 4 part-time employees. Of these, 12 are engaged in full-time research and development and laboratory operations, 19 are engaged in full-time general and administrative functions, 4 are full-time employees engaged in the clinic operation and 4 part-time employees are engaged in sponsored research and development, clinic operations, finance, and legal clerical support. As of the date of hereof, 38 of our employees are located in Asia and 1 of our employees is located in Europe. In addition, we have engaged and may continue to engage 48 independent contracted consultants and advisors to assist us with our operations. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have never experienced any employment related work stoppages, and we consider our relations with our employees to be good.

Facilities

We have several operating leases for offices, laboratories and clinic. Our offices are located in London, New York and Hong Kong.

Our office space in London consists of approximately 172 square feet under a lease that commenced in August 2019, expires in March 2020 and has a rent of \$2,715 per month, and renewed in April 2020, expires in November 2020 and has a rent of \$3,313 per month. Our office space in New York consists of approximately 95 square feet under a lease that commenced in February 2020, which will automatically renew until 1 month's notice for termination, and has a rent of \$1,844 per month. Our facilities in Hong Kong consists of: (i) 638 square feet lab space under a lease that commenced in December 2017 and expires in December 2020, that carries a monthly rent of \$2,127 and which is used for the center for R&D (the "previous R&D Center"); (ii) 851 square feet office space under a lease that commenced in December 2017 and expires in December 2020 that carries a monthly rent of \$2,509, (the "HKSTP Office Space"); (iii) 2,021 square feet lab space that commenced in March 2020 and expires in March 2023, that carries a monthly rent of \$6,348 (the "new R&D Center"); and (iv) 3,173 square feet space under a lease that commenced in March 2018 and expires in March 2022 (the "AML Lease", which is home to AML Clinic). The previous R&D Center will be expected to be terminated in the fourth quarter of 2020.

Payments under operating leases are expensed on a straight-line basis over the periods of the respective leases, and the terms of the leases do not contain rent escalation, contingent rent, and renewal or purchase options.

We believe our current facilities are sufficient to meet our needs.

Legal Proceedings

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

Directors and Executive Officers

Below is a list of our directors and executive officers, as of the date of this prospectus, and a brief account of the business experience of each of them. The business address for the directors and officers of Aptorum Group Limited is 17 Hanover Square, London W1S 1BN, United Kingdom.

On October 10, 2019, Mr. Lui resigned from his position as Chief Business Officer.

Name	Age	Position
<i>Executive Officers</i>		
Ian Huen	40	Founder, Chief Executive Officer and Executive Director
Darren Lui	39	President and Executive Director
Clark Cheng	40	Chief Medical Officer and Executive Director
Sabrina Khan	39	Chief Financial Officer
Thomas Lee	47	Head of Research and Development
Angel Ng	39	Chief Operating Officer
<i>Non-Management Directors</i>		
Charles Bathurst	65	Independent Non-Executive Director and Chair of Audit Committee
Mirko Scherer	52	Independent Non-Executive Director
Justin Wu	50	Independent Non-Executive Director and Chair of Compensation Committee
Douglas Arner	51	Independent Non-Executive Director and Chair of Nominating and Corporate Governance Committee

Executive Officers

MR. IAN HUEN, Founder, Chief Executive Officer and Executive Director

Mr. Ian Huen is the Founder, Chief Executive Officer and Executive Director of Aptorum Group Limited. Mr. Huen is also Co-Founder of a Hong Kong company, AENEAS CAPITAL LIMITED, a licensed corporation regulated by the Hong Kong Securities & Futures Commission as a Type 9 Asset Manager, since 2005. He has over 17 years of global asset management experience and previously covered the U.S. healthcare sector as an equity research analyst at Janus Henderson Group plc (formerly known as Janus Capital). Mr. Huen was the financial advisor in the sale of Seng Heng Bank Limited (Macau) to Industrial and Commercial Bank of China in 2007 and was appointed as the vice president of the Board of General Meeting in Industrial and Commercial Bank of China (Macau) Capital Limited in March 2007 for a term of 12 years until March 2019.

As a trustee board member of the Dr. Stanley Ho Medical Development Foundation, Mr. Huen facilitates advisory, development funding, access to research resources across Asia and continues to establish relationships with leading academic institutions to propel innovations in healthcare.

Mr. Huen graduated from Princeton University with an A.B. degree in Economics in June 2001, earned a MA in Comparative and Public History from CUHK in June 2016. Mr. Huen is also a Chartered Financial Analyst (“CFA”).

MR. DARREN LUI, President and Executive Director

Mr. Darren Lui is the President and an Executive Director of Aptorum Group Limited. Mr. Lui is also an Executive Director and Co-Founder of AENEAS CAPITAL LIMITED, a licensed corporation regulated by the Hong Kong Securities & Futures Commission as a Type 9 Asset Manager.

Mr. Lui was previously the founder, director and responsible officer of Varengold Capital Securities Limited and Varengold Capital Asset Management Limited in Hong Kong, with subsidiaries operating brokerage, asset management, and investment businesses in Asia established since January 2015.

Prior to this, he was a Director within the Fixed Income Group of Barclays Capital, where he spent over nine years from September 2005 to February 2014 developing and establishing their London, Singapore and New York structuring teams. From September 2002 to August 2005 he was qualified as a Chartered Accountant with Ernst & Young LLP (London), specializing in capital markets advisory.

Mr. Lui graduated with First-Class Honors from Imperial College, London with a BSc degree in Biochemistry in June 2002. He is a Chartered Accountant (ICAS), a CFA, and an Associate of Chartered Institute of Securities & Investments (UK).

DR. CLARK CHENG, Chief Medical Officer and Executive Director, Aptorum Group Limited**Executive Director, Aptorum Medical Limited**

Dr. Clark Cheng is the Chief Medical Officer and Executive Director of Aptorum Group Limited; he is also an executive director of AML; Dr. Cheng also serves as a director of several other of our subsidiaries. Prior to this appointment, Dr. Cheng served as the Operations Director since 2009 of Raffles Medical Group, and the company's Deputy General Manager since 2011, representing an expanded role in the region. During his employment with Raffles Medical Group, he practiced as a full-time medical administrator to overlook Raffles Medical Hong Kong operations and supported its development in the PRC.

Dr. Cheng received his medical training at the University College London, UK, in 2005 and completed his foundation year training at The Royal Free Hospital in 2007. Pursuing his career in surgery, he obtained his membership of the Royal College of Surgeons of Edinburgh in 2009 and commenced his training in Orthopaedics where he practiced as Specialist Registrar at the National University Hospital, Singapore, with special interest in Traumatology of the lower limbs. In 2011, he also obtained his Master in Business & Administration with distinction from Tippie College of Business, University of Iowa, US.

Dr. Cheng is an active member of the Singapore Chamber of Commerce, and appears regularly as a guest speaker for The Open University of Hong Kong, The Airport Authority Hong Kong and other corporate events.

MISS SABRINA KHAN, Chief Financial Officer

Miss Sabrina Khan is the Chief Financial Officer of Aptorum Group Limited. She leads the Company's financial strategy and operations, as well as Investor Relations. She has extensive experience working at KPMG (Hong Kong) and Ernst & Young LLP (Hong Kong). She was a regional financial controller in Asia for St. James's Place Wealth Management (Hong Kong), which St. James's Place Wealth Management Group (LON: STJ) is a FTSE100 company. Prior to that, she served as the senior finance manager of Neo Derm Group, a leading medical aesthetic group in Asia, in charge of its finance-related matters and expansion in the PRC. From August 2009 to May 2013, she served as the senior finance manager of Global Cord Blood Corporation (formerly known as China Cord Blood Corporation (NYSE: CO)), which was previously a subsidiary of Golden Meditech Holdings Limited (HK: 801), where she played an important role with the NYSE listing filings, investor relations and post IPO reporting. During her employment with Global Cord Blood Corporation, she was actively involved in the issuance of convertible bonds to Kohlberg Kravis Roberts and various merger and acquisition projects, facilitated and liaised with investment banks on due diligence, deal structuring, and also involved in commercial negotiation with respect to major contract terms.

Miss Khan qualified as certified public accountant and graduated with a BBA (Hons) in Accounting & Finance at The University of Hong Kong in 2003. She was qualified as an Advanced China Certified Taxation Consultant in 2015.

DR. THOMAS LEE, Head of Research and Development

Dr. Thomas Lee is the Head of Research & Development of Aptorum Group Limited. He served as Chief Executive Officer and Chief Scientific Officer of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from January 2018 to March 2019. Prior to that, Dr. Lee served as an Assistant Professor in the School of Pharmacy, Faculty of Medicine, The Chinese University of Hong Kong from August 2013 to January 2018. Dr. Lee's key area of research involves drug delivery with specialties including: formulation development of poorly soluble compounds, oral delivery, Nanotechnology, and similar fields.

Prior to academia, Dr. Lee accumulated big-pharma experience from the decade he spent at two multinational pharmaceutical companies in the U.S. From November 2008 to July 2013, Dr. Lee worked at Celgene Corporation as a Senior Scientist of the Formulations Research & Development. From June 2003 to November 2008, Dr. Lee worked at Novartis Pharmaceuticals Corporation, as a Principal Scientist.

Dr. Lee graduated with B.Pharm. (Hons) Degree from The Chinese University of Hong Kong in December 1995, and received his Ph.D. in Pharmaceutical Sciences (Drug Delivery) from the University of Wisconsin-Madison in the U.S in May 2003.

DR. ANGEL NG, Chief Operating Officer

Dr. Angel Ng is the Chief Operating Officer of Aptorum Group Limited. She served as the Chief Operating Officer ("COO") of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from September 2017 to March 2019. During this time, Dr. Ng led Aptorum Therapeutics Limited and its subsidiaries' operations and business strategies. Dr. Ng has extensive experience in project management with Innovation and Technology government funds and academic institutions.

Since September 2016, Dr. Ng works as a Research Officer cum Project Manager at The University of Hong Kong ("HKU") in project management for various research projects including government funded project of novel medical device. During this time, Dr. Ng led the research team towards cadaveric trial for a novel soft robotics medical device and coordinated all research related agreements. During December 2014 to September 2015, Dr. Ng served as Project Manager at Hong Kong Science & Technology Parks Corporation ("HKSTP"), where she worked on technology transfer and commercialization for research and development projects through partnerships between local universities and the worldwide network and expertise of the Oxford University commercial arm. Dr. Ng also worked for The Chinese University of Hong Kong ("CUHK") as Project Manager from September 2007 to January 2009. She managed a HK\$60M government funded R & D project with a team of specialists in CUHK where she kept close liaison with industry and government authorities. Dr. Ng was in the precision chemical machining industry from 2003 to 2007, where she managed the manufacturing team and business operations in PRC.

Dr. Ng serves as a Director of Tecford Trading & Technology Company Limited since December 2017. Dr. Ng graduated with a B.Sc (Hons) from Department of Chemistry at HKU in December 2002, received her M.Sc in Composite Materials from Imperial College London in November 2003 and obtained her Ph.D. in Mechanical Engineering from HKU in December 2015.

Independent Non-Executive Directors**MR. CHARLES BATHURST**

Mr. Bathurst is an Independent Non-Executive Director of Aptorum Group Limited. He has over 41 years' experience of management and senior executive roles primarily in financial services. In 2011, he set up his own independent consultancy service, Summerhill Advisors Limited, advising on management structure, business development, financial reporting, internal audit controls and compliance to both emerging and multinational companies. Today he holds Non-Executive and Advisory board positions on fast-growing companies in healthcare, technology and financial services.

Prior to establishing Summerhill, he served as a Director for J.O. Hambro Investment Management from September 2008 to August 2011, where he oversaw the restructuring and commercialization a range of in-house investment funds. He was appointed to the management board and supervised reporting teams including Business development, accounting teams, regulatory reporting teams and internal controls.

From April 2004 to March 2008, Mr. Bathurst served in multiple roles at Old Mutual Asset Managers (UK), including being a member of the senior management team and head of international sales. Duties included business development, launching new investment funds, recruitment, establishing and supervision of regulatory and financial reporting teams, as well as ensuring compliance with funds' regulatory requirements and corporate governance standards.

Prior to this, Mr. Bathurst was an advisor to Lion Capital Advisors Limited from April 2003 to March 2004, and from June 2002 to March 2003 business development reporting to the board of management of LCF Rothschild Asset Management Limited.

From April 1995 to March 2002, Mr. Bathurst joined a newly formed alternative investment management team at Credit Agricole Asset Management, establishing the London Branch as the Managing Director in 1998. He was responsible for the recruitment and development strategy for marketing, sales, investment, financial reporting, compliance and regulatory controls and investor relations.

Between the period of September 1989 and December 1994, Mr. Bathurst worked for GNI, the largest futures and options execution and clearing broker on the London International Financial Futures Exchange, where he focused on marketing to European and Middle East financial institutions. In 1991, he joined a new management team to launch a series of specialist investment funds while serving as the Head of Sales and Product Development.

Mr. Bathurst graduated from the Royal Military Academy Sandhurst in November 1974 and commissioned into the British Army serving in the UK and Germany.

DR. MIRKO SCHERER

Dr. Mirko Scherer is an Independent Non-Executive Director of Aptorum Group Limited. Dr. Scherer has been serving as the Chief Executive Officer at CoFeS China (formerly known as "TVM Capital China") in Hong Kong since March 2015. CoFeS China focuses on cross-border activities in the life science industry between China and the West. CoFeS China acts as a bridge between China and the West, assisting Chinese investors and pharmaceutical companies accessing western innovations, while collaborating with innovative life science companies from the West to enter the fast-growing China market.

Dr. Mirko Scherer has served on the Board of the Frankfurt Stock Exchange from 2005 to 2007 and has been a board member of the Stichting Preferente Aandelen QIAGEN since 2004. From August 2016 through July 2018, Dr. Scherer served as a Non-Executive board member of Quantapore Inc. and from April 2015 through September 2017, he was a director of China BioPharma Capital I, (GP).

Dr. Scherer is an experienced biotechnology executive and has led numerous financing M&A and licensing transactions, in both public and private markets, in Europe and the U.S. for over 20 years. He consulted MPM Capital for the period between July 2012 and December 2014. Dr. Scherer was also a co-founder and partner of KI Kapital from November 2008 to February 2014, a company which was specialized in providing consultation in life science industry.

Prior to working in the venture capital industry, Dr. Scherer co-founded GPC Biotech (Munich and Princeton, NJ) and served as the Chief Financial Officer from October 1997 to December 2007. GPC Biotech engaged in numerous pharmaceutical alliances with companies such as Sanofi Aventis, Boehringer Ingelheim, Altana (now part of Takeda), Yakult, and Pharmion (now part of Celgene). Over the past 20 years, Dr. Scherer has established an extensive network in the U.S., European, and China's biotechnology and venture capital industry. Prior to his time at GPC Biotech, Dr. Scherer worked as a consultant from May 1993 to June 1994 at the Boston Consulting Group.

Dr. Scherer earned a Doctorate in Finance from the European Business School in Oestrich-Winkel/Germany in 1998, a MBA from Harvard Business School in June 1996, and a degree in Business Administration from the University of Mannheim/Germany in February 1993.

DR. JUSTIN WU

Dr. Justin Wu is an Independent Non-Executive Director of Aptorum Group Limited. He also has been serving as the Chief Operating Officer of CUHK Medical Centre since August 2018. He served as the Associate Dean (Development) of the Faculty of Medicine at CUHK from July 2014 to June 2018 and the Associate Dean (Clinical) of the Faculty of Medicine at CUHK from December 2012 to July 2014, and has been serving a Professor in the Department of Medicine and Therapeutics since 2009, also the Director of the S. H. Ho Center for Digestive Health, a research center specializing in functional gastrointestinal diseases, reflux and motility disorders, and digestive endoscopy. Active in research publications and assessments, Dr. Wu served as the International Associate Editor of American Journal of Gastroenterology ("AJG"), and Managing Editor of Journal of Gastroenterology and Hepatology ("JGH"). He is also the Secretary General of the Asian Neurogastroenterology and Motility Association ("ANMA"), and Secretary General of the Asia Pacific Association of Gastroenterology ("APAGE").

Dr. Wu has won a number of awards including the Emerging Leader in Gastroenterology Award by the JGH Foundation, and the Vice Chancellor's Exemplary Teaching Award at CUHK. Aside from his expertise in gastroenterology, Dr. Wu has an extensive interest in the development of Integrative Medicine in Hong Kong. He is the Founding Director of the Hong Kong Institute of Integrative Medicine, working closely with the School of Chinese Medicine to develop an integrative model at an international level. The institute aims at maximizing the strength of Western and Chinese medicine to provide a safe and effective integrative treatment to patients.

Dr. Wu served as a consultant and an advisory board member for Takeda Pharmaceutical, AstraZeneca, Menarini, Reckitt Benckiser and Abbott Laboratory. He earned his Bachelor of Medicine and Bachelor of Surgery Degree (1993), and his Doctor of Medicine Degree (2000) from CUHK. Additionally, he attained Fellowships of the Royal College of Physicians of Edinburgh and London in 2007 and 2012 respectively, Fellowship of the Hong Kong College of Physicians in 2002, Fellowship of the Hong Kong Academy of Medicine in 2002, and has been an American Gastroenterological Association Fellow since 2012.

PROFESSOR DOUGLAS ARNER

Professor Douglas W. Arner is an Independent Non-Executive Director of Aptorum Group Limited. He is the Kerry Holdings Professor in Law at the University of Hong Kong and one of the world's leading experts on financial regulation, particularly the intersection between law, finance and technology. At HKU, he is Faculty Director of the Faculty of Law's LLM in Compliance and Regulation, LLM in Corporate and Financial Law and Law, Innovation, Technology and Entrepreneurship (LITE) Programmes. He is a Senior Visiting Fellow of Melbourne Law School, University of Melbourne, and an Executive Committee Member of the Asia Pacific Structured Finance Association. He led the development of the world's largest massive open online course (MOOC): Introduction to FinTech, launched on edX in May 2018, now with over 35,000 learners spanning every country in the world. From 2006 to 2011, he was the Director of HKU's Asian Institute of International Financial Law, which he co-founded in 1999, and from 2012 to 2018, he led a major research project on Hong Kong's future as a leading international financial center. He was an inaugural member of the Hong Kong Financial Services Development Council, of which he was a member from 2013-2019. Douglas served as Head of the HKU Department of Law from 2011 to 2014 and as Co-Director of the Duke University-HKU Asia-America Institute in Transnational Law from 2005 to 2016. He has published fifteen books and more than 150 articles, chapters and reports on international financial law and regulation, including most recently Reconceptualising Global Finance and its Regulation (Cambridge 2016) (with Ross Buckley and Emiliós Avgouleas). The RegTech Book (forthcoming 2019, with Janos Barberis and Ross Buckley). His recent papers are available on SSRN at https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=524849, where he is among the top 150 authors in the world by total downloads.

Douglas has served as a consultant with, among others, the World Bank, Asian Development Bank, APEC, Alliance for Financial Inclusion, and European Bank for Reconstruction and Development, and has lectured, co-organized conferences and seminars and been involved with financial sector reform projects around the world. He has been a visiting professor or fellow at Duke, Harvard, the Hong Kong Institute for Monetary Research, IDC Herzliya, McGill, Melbourne, National University of Singapore, University of New South Wales, Shanghai University of Finance and Economics, and Zurich, among others. Since March 1, 2018, Professor Arner is the Senior Regulatory & Strategic Advisor of AENEAS CAPITAL LIMITED, a licensed corporation regulated by the Hong Kong Securities & Futures Commission as a Type 9 Asset Manager.

He holds a BA from Drury College (where he studied literature, economics and political science) in 1992, a JD (cum laude) from Southern Methodist University in 1995, an LLM (with distinction) in banking and finance law from the University of London (Queen Mary College) in 1996, and a PhD from the University of London in 2005.

Corporate Governance

As long as our officers and directors, either individually or in the aggregate, own at least 50% of the voting power of our Company, we will be a “controlled company” as defined under NASDAQ Marketplace Rules (specifically, as defined in Rule 5615(c)). We have no current intention to rely on the controlled company exemptions afforded to a controlled company under the NASDAQ Marketplace Rules.

Composition of Our Board of Directors

Our Board of Directors currently consists of seven members, all of whom were elected pursuant to our current Memorandum and Articles. Our nominating and corporate governance committee and board of directors will consider a broad range of factors relating to the qualifications and background of nominees, which may include diversity and is not limited to race, gender or national origin. We have no formal policy regarding board diversity. Our nominating and corporate governance committee’s and board of directors’ priority in selecting board members is identification of persons who will further the interests of our shareholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and professional and personal experiences and expertise relevant to our growth strategy.

There is no Cayman Islands law requirement that a director must hold office for a certain term and stand for re-election unless the resolutions appointing the director impose a term on the appointment. The Memorandum and Articles provide that our directors will be elected annually to serve a term of one year, or until his or her earlier resignation or removal. We do not have any age limit requirements relating to our director’s term of office.

Our Memorandum and Articles also provide that our directors may be removed by the directors or ordinary resolution of the shareholders, and that any vacancy on our Board of Directors, including a vacancy resulting from an enlargement of our Board of Directors (which shall not exceed any maximum number stated therein), may be filled by ordinary resolution or by vote of a majority of our directors then in office.

Director Independence

Our Board of Directors has determined that Justin Wu, Mirko Scherer, Douglas Arner and Charles Bathurst are independent, as determined in accordance with the rules of the NASDAQ Global Market. In making such independence determination, our Board of Directors considered the relationships that each such non-employee director has with us and all other facts and circumstances that the board of directors deemed relevant in determining their independence, including the beneficial ownership of our share capital by each non-employee director and the transactions involving them described in the section titled “Transactions with Related Persons.” We believe that the composition and functioning of our Board of Directors and each of our committees comply with all applicable requirements of the NASDAQ Global Market and the rules and regulations of the SEC. There are no family relationships among any of our directors or executive officers.

Board’s Role in Risk Oversight

Our Board of Directors oversees the management of risks inherent in the operation of our business and the implementation of our business strategies. Our Board of Directors performs this oversight role by using several different levels of review. In connection with its reviews of our operations and corporate functions, our Board of Directors addresses the primary risks associated with those operations and corporate functions. In addition, our Board of Directors reviews the risks associated with our business strategies periodically throughout the year as part of its consideration of undertaking any such business strategies.

Each of our board committees also oversees the management of our risk that falls within the committee's areas of responsibility. In performing this function, each committee has full access to management, as well as the ability to engage advisors. Our Chief Financial Officer reports to the audit committee and is responsible for identifying, evaluating and implementing risk management controls and methodologies to address any identified risks. In connection with its risk management role, our audit committee meets privately with representatives from our independent registered public accounting firm and our Chief Financial Officer. The audit committee oversees the operation of our risk management program, including the identification of the primary risks associated with our business and periodic updates to such risks, and reports to our Board of Directors regarding these activities.

Board Committees

Our Board of Directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which operates pursuant to a separate charter adopted by our Board of Directors. The composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the NASDAQ Global Market and SEC rules and regulations. Our Board of Directors may establish other committees from time to time.

Audit Committee

Charles Bathurst, Douglas Arner and Justin Wu currently serve on the audit committee, which is chaired by Charles Bathurst. Our Board of Directors has determined that each member of the audit committee is "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable rules of the NASDAQ Global Market. The audit committee's responsibilities include:

- selecting and appointing our independent registered public accounting firm, and approving the audit and permitted non-audit services to be provided by our independent registered public accounting firm;
- evaluating the performance and independence of our independent registered public accounting firm;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements or accounting matters;
- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures;
- establishing procedures for the receipt, retention and treatment of accounting-related complaints and concerns;
- reviewing and discussing with the independent registered public accounting firm the results of our year-end audit, and recommending to our Board of Directors, based upon such review and discussions, whether our financial statements shall be included in our Annual Report on Form 20-F;
- reviewing all related party transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing the type and presentation of information to be included in our earnings press releases, as well as financial information and earnings guidance provided by us to analysts and rating agencies.

Audit Committee Financial Expert

We have one financial expert as of the date hereof. Our Board of Directors has determined that Mr. Charles Bathurst, Chair of our audit committee, qualifies as an "audit committee financial expert" as defined in the SEC rules and satisfies the financial sophistication requirements of The NASDAQ Global Market.

Compensation Committee

Charles Bathurst, Douglas Arner and Justin Wu currently serve on the compensation committee, which is chaired by Justin Wu. Our Board of Directors has determined that each member of the compensation committee is “independent” as that term is defined in the applicable rules of the NASDAQ Global Market. The compensation committee’s responsibilities include:

- reviewing the goals and objectives of our executive compensation plans, as well as our executive compensation plans in light of such goals and objectives;
- evaluating the performance of our executive officers in light of the goals and objectives of our executive compensation plans and recommending to our Board of Directors with respect to the compensation of our executive officers;
- reviewing the goals and objectives of our general compensation plans and other employee benefit plans as well as our general compensation plans and other employee benefit plans in light of such goals and objectives;
- retaining and approving the compensation of any compensation advisors;
- reviewing all equity-compensation plans to be submitted for shareholder approval under the NASDAQ listing rules, and reviewing and approving all equity-compensation plans that are exempt from such shareholder approval requirement;
- evaluating the appropriate level of compensation for board and board committee service by non-employee directors; and
- reviewing and approving description of executive compensation included in our Annual Report on Form 20-F.

Nominating and Corporate Governance Committee

Charles Bathurst, Douglas Arner and Justin Wu currently serve on the nominating and corporate governance committee, which is chaired by Professor Arner. Our Board of Directors has determined that each member of the nominating and corporate governance committee is “independent” as that term is defined in the applicable rules of the NASDAQ Global Market. The nominating and corporate governance committee’s responsibilities include:

- assisting our Board of Directors in identifying prospective director nominees and recommending nominees for election by the shareholders or appointment by our Board of Directors;
- advising the board of directors periodically with respect to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to our Board of Directors on all matters of corporate governance and on any corrective action to be taken;
- overseeing the evaluation of our Board of Directors; and
- recommending members for each board committee of our Board of Directors.

Scientific Advisory Board

We restructured the Scientific Assessment Committee into a newly formed Scientific Advisory Board. The Scientific Advisory Board shall help the Company sharpen its focus on innovation and technological advancements and address critical scientific challenges in our research and development; it will provide overall advise on the scientific development of the company. As of the date hereof, we have 26 members of the Board.

In light of the Company’s focus on developing treatment for infectious diseases, we have established a second scientific advisory board, i.e., the Infectious Diseases Scientific Advisory Board in April 2020. As of the date hereof, the Infectious Diseases Scientific Advisory Board have 4 members.

Code of Business Conduct and Ethics

Our board has adopted a code of business conduct and ethics that applies to our directors, officers and employees. A copy of this code is available on our website: www.aptorumgroup.com. We intend to disclose on our website or in a current report on Form 6-K, any amendments to the Code of Business Conduct and Ethics and any waivers of the Code of Business Conduct and Ethics that apply to our principal executive officer, principal financial officer, principal accounting officer, controller, or persons performing similar functions.

Duties of Directors

Under Cayman Islands law, our directors have a duty to act honestly, in good faith and with a view to our best interests. Our directors also have a duty to exercise the care, diligence and skills that a reasonably prudent person would exercise in comparable circumstances. (See "Description of Share Capital – Differences in Corporate Law") In fulfilling their duty of care to us, our directors must ensure compliance with our Memorandum and Articles. We have the right to seek damages if a duty owed by our directors is breached.

The functions and powers of our Board of Directors include, among others:

- appointing officers and determining the term of office of the officers;
- authorizing the payment of donations to religious, charitable, public or other bodies, clubs, funds or associations as deemed advisable;
- exercising the borrowing powers of the company and mortgaging the property of the company;
- executing checks, promissory notes and other negotiable instruments on behalf of the company; and
- maintaining or registering a register of mortgages, charges or other encumbrances of the company.

Interested Transactions

So long as it does not adversely affect such person's performance of duties or responsibilities to the Company and so long as it is not in direct competition with the Company and the Company's business, no director or officer shall be disqualified by his office from contracting and/or dealing with the Company as vendor, purchaser or otherwise; nor shall any such contract or any contract or arrangement entered into by or on behalf of the Company in which any director or officer shall be in any way interested be or be liable to be avoided; nor shall any director or officer so contracting or being so interested be liable to account to the Company for any profit realized by any such contract or arrangement by reason of such director or officer holding that office or the fiduciary relationship thereby established. However, any such transaction that would reasonably be likely to affect a director status as an "Independent Director," or that would constitute a "related party transaction" pursuant to the laws or rules promulgated by the SEC or the stock exchange on which our shares are then listed, shall require the review and approval of the Audit Committee. The nature of the director's interest must be disclosed by him at the meeting of the directors at which the contract or arrangement is considered if his interest then exists, or in any other case, at the first meeting of the directors after the acquisition of his interest. A director, having disclosed his interest as aforesaid, shall not be counted in the quorum and shall refrain from voting as a director in respect of any contract or arrangement in which he is as interested as aforesaid.

A director must promptly disclose the interest to all other directors after becoming aware of the fact that he or she is interested in a transaction we have entered into or are to enter into. A general notice or disclosure to the board or otherwise contained in the minutes of a meeting or a written resolution of the board or any committee of the board that a director is a shareholder, director, officer or trustee of any specified firm or company and is to be regarded as interested in any transaction with such firm or company will be sufficient disclosure, and, after such general notice, it will not be necessary to give special notice relating to any particular transaction.

Qualification

The shareholding qualification for directors may be fixed by the Company in general meeting, and unless and until so fixed no qualification shall be required.

Compensation of Executive Officers and Directors

The following table sets forth all cash compensation paid by us, as well as certain other compensation paid or accrued, in fiscal 2019 to each of the following named executive officers. The total amount was \$2.7 million in 2019. A total 91,477 options were awarded to directors and executive officers in 2019. This amount does not include business travel, relocation, professional and business association dues and expenses reimbursed to such persons, and other benefits commonly reimbursed or paid by companies in our industry. In addition to the compensation included in the table below, which covers the fiscal year ended December 31, 2019, we issued an aggregate of 378,193 options to the persons included in the table below since January 1, 2020 through the date of this prospectus.

The base salary of Mr. Huen and Dr. Cheng shall remain unchanged in 2020, and the base salary of Mr. Lui has been adjusted to US\$6,667 per month with effect from January 10, 2020 due to his resignation as Chief Business Officer. The Company entered into a consulting agreement with CGY Investment Limited effective on January 10, 2020, with a monthly service fee of HK\$104,000 (approximately US\$13,333 per month). CGY is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother). Mr. Lui controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother. Hence, for the purposes of this filing and disclosure, 50% of the consulting service fee and share options will be deemed as Mr. Lui's compensation.

Name and Principal Position	Fiscal Year	Salary (\$) ⁽¹⁾	Bonus (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$) ⁽¹⁰⁾	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Ian Huen ⁽²⁾ (CEO)	2019	288,000	24,000	148,275	129,791	2,308	-	592,374
Darren Lui ⁽³⁾ (CBO, President)	2019	240,000	20,000	148,275	129,791	2,308	-	540,374
Clark Cheng ⁽⁴⁾ (CMO)	2019	279,295	23,275	148,275	129,791	2,308	112 ⁽⁶⁾	583,056
Sabrina Khan ⁽⁵⁾ (CFO)	2019	196,000	65,333	70,040	61,310	2,308	-	394,991
Thomas Lee ⁽⁷⁾ (Head of R&D)	2019	168,000	18,667	148,275	129,791	2,308	-	467,041
Angel Ng ⁽⁸⁾ (COO)	2019	72,000	8,000	11,440	10,012	2,308	-	103,760
Dr. Keith Chan ⁽⁹⁾	2019	30,000	-	-	-	-	-	30,000

(1) The Appointment Letters provide salaries in HKD; for purposes of this table, we used a conversion ratio of HKD7.80 to USD1.00 to determine the salary in USD.

- (2) Mr. Huen is the founder and was appointed as the Chief Executive Officer of Aptorum Group on October 1, 2017. Before that, he was a director of the Company.
- (3) Mr. Lui was appointed as the Chief Business Officer and President of Aptorum Group on October 1, 2017 and resigned as Chief Business Officer on October 10, 2019.
- (4) Dr. Cheng was appointed as the Chief Medical Officer of Aptorum Group on January 2, 2018.
- (5) Miss Khan was appointed as the Chief Financial Officer of Aptorum Group on October 16, 2017.
- (6) Pursuant to Dr. Cheng's appointment letter, Dr. Cheng received a share bonus of 526 ordinary shares of AML, representing 5% of AML's issued and outstanding ordinary shares (the "Share Bonus") in 2018. Based on the Company's financial position and Dr. Cheng's performance, on each anniversary of Dr. Cheng's employment commencement date, the Share Bonus is eligible to increase by 1% of AML's then issued and outstanding ordinary share count per year up to a maximum additional amount of 5% of AML's then issued and outstanding ordinary share count by the 5th anniversary from his employment commencement date. As of the date of this prospectus, Dr. Cheng received a total of 753 ordinary shares of AML, representing 7% of AML's issued and outstanding ordinary shares; during fiscal 2019, Dr. Cheng received 112 ordinary shares of AML, the cash value of which is USD112.
- (7) Dr. Lee was appointed as the Head of Research & Development of Aptorum Group on April 1, 2019. Before that, he was the Chief Executive Officer and Chief Scientific Officer of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from January 2018 to March 2019, for which he received an aggregate of \$56,000 for the period from January 1, 2019 to March 31, 2019. This table only includes the compensation paid or payable to Dr. Lee for the period from April 1, 2019 to December 31, 2019.
- (8) Dr. Ng was appointed as the Chief Operating Officer of Aptorum Group on April 1, 2019. Before that, she was the Chief Operating Officer of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from September 2017 to March 2019, for which she received an aggregate of \$24,000 for the period from January 1, 2019 to March 31, 2019. This table only includes the compensation paid or payable to Dr. Ng for the period from April 1, 2019 to December 31, 2019.
- (9) As described elsewhere in this prospectus, we were party to a consulting agreement dated August 18, 2017 with GloboAsia, LLC, for which Dr. Chan serves as the Director of International Affairs. All fees payable to Dr. Chan for services provided to us as Chief Scientific Officer were paid to GloboAsia, LLC, pursuant to the consulting agreement and appointment letter with Dr. Chan. Following Dr. Chan's resignation in March 2019, the consulting agreement was terminated effective as of March 31, 2019. No other compensation was paid or payable to Dr. Chan for the period from April 1, 2019 to December 31, 2019.
- (10) Represents deferred bonuses provided to directors and executive officers, which will be vested after 1-2 year vesting period.

Compensation of Non-executive Directors

The following table sets forth information for the fiscal year ended December 31, 2019 regarding the compensation of our non-executive directors who at December 31, 2019, were not also named executive officers. A total 8,044 options were awarded to non-executive directors in 2019. In addition to the compensation included in the table below, which covers the fiscal year ended December 31, 2019, we issued an aggregate of 45,504 options to the persons included in the table below since January 1, 2020 through the date of this prospectus.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Non-qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Charles Bathurst ⁽¹⁾	48,000 ⁽²⁾	-	14,832	12,987	-	-	75,819
Mirko Scherer ⁽³⁾	30,000	-	14,832	12,987	-	-	57,819
Justin Wu ⁽⁴⁾	30,000	-	14,832	12,987	-	-	57,819
Douglas Arner ⁽⁵⁾	30,000	-	14,832	12,987	-	-	57,819

(1) Mr. Bathurst was appointed as one of our directors as of October 2017 and pursuant to his appointment letter, is entitled to receive \$48,000 annually for his combined services as a director and a committee member.

(2) Mr. Bathurst's appointment Letter provides his salary in GBP. For purposes of this table, we used a conversion ratio of GBP0.75 to USD1.00 to determine his salary in USD; however, the ultimate amount paid is based on the actual rate as of the relevant pay day at the end of each month.

(3) Dr. Scherer was appointed as one of our directors as of October 2017 and pursuant to his appointment letter, is entitled to receive \$30,000 annually for his services as a director.

(4) Dr. Wu was appointed as one of our directors as of October 2017 and pursuant to his appointment letter, is entitled to receive \$30,000 annually for his combined services as a director and a committee member.

(5) Professor Arner's appointment as one of our directors became effective as of April 1, 2018. Pursuant to his appointment letter, Professor Arner is entitled to receive \$30,000 annually for his combined services as a director and a committee member.

2017 Share Option Plan

On October 13, 2017, we adopted the 2017 Share Option Plan (the "Option Plan"). Under the Option Plan, up to an aggregate of 5,500,000 Class A Ordinary Shares (subject to subsequent adjustments described more fully below) may be issued pursuant to awards under the Option Plan. Subsequent adjustments include that on each January 1, starting with January 1, 2020, an additional number of shares equal to the lesser of (A) 2% of the outstanding number of Class A Ordinary Shares (on a fully diluted basis) on the immediate preceding December 31, and (B) such lower number of Class A Ordinary Shares as may be determined by the board of directors, subject in all cases to adjustments as provided in Section 10 of the Option Plan. Awards will be made pursuant to agreements and may be subject to vesting and other restrictions as determined by the board of directors.

We adopted the Option Plan to provide additional incentives to selected directors, officers, employees and consultants, and enable our Company to obtain and retain the services of these individuals. The Option Plan will enable us to grant options, restricted shares or other awards to our directors, employees and consultants. Awards will be made pursuant to agreements and may be subject to vesting and other restrictions as determined by the board of directors.

As of the date of this prospectus, we have granted options that can be exercised for an aggregate of 931,264 Class A Ordinary Shares. Additionally, pursuant to his appointment letter, on each anniversary of his appointment, Dr. Majzner shall be granted an option to purchase that number of Class A Ordinary Shares with a value of no less than \$20,000. 218,222 options were granted on March 15, 2019. One-half of each option grant vests on January 1, 2020 and the other half vests on January 1, 2021. The exercise price is \$12.91 per share, which was based on the closing price of the shares traded on the NASDAQ stock exchange on the trading day preceding the grant date. 536,777 options were granted on March 16, 2020. Nearly one-half of each option grant vests on January 1, 2021 and the remaining vests on January 1, 2022. The exercise price is US\$2.99 per share, which was based on the average closing price of the shares traded on the NASDAQ stock exchange for the five trading days immediately preceding the grant date. 148,792 options were granted on June 1, 2020. Nearly one-half of each option grant vests on December 1, 2020 and the remaining vests on January 1, 2021. The exercise price is US\$3.11 per share, which was based on the average closing price of the shares traded on the NASDAQ stock exchange for the five trading days immediately preceding the grant date. 27,473 options were granted on August 10, 2020 to Dr. Weiss, which will be vested on August 10, 2021. The exercise price is \$3.64 per share, which was based on the average closing price of the shares traded on the NASDAQ stock exchange for the five trading days immediately preceding the grant date.

Limitation on Liability and Other Indemnification Matters

The Companies Law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. Our Memorandum and Articles permit indemnification of officers and directors for actions, proceedings, claims, losses, damages, costs, liabilities and expenses ("Indemnified Losses") incurred in their capacities as such unless such Indemnified Losses arise from dishonesty of such directors or officers. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

TRANSACTIONS WITH RELATED PERSONS

The following discussion is a brief summary of certain material arrangements, agreements and transactions we have with related parties since January 1, 2016, other than the compensation and shareholding arrangements we describe in "Management" and "Principal Shareholders." We also engage in other transactions with related parties that we do not perceive as material.

Line of Credit

On August 13, 2019 (the "Effective Date"), Aptorum Therapeutics Limited ("ATL"), entered into two separate Promissory Notes and Line of Credit Agreements (the "Agreements") with AGL and Jurchen. The AGL Agreement and Jurchen Agreement provide ATL with a line of credit up to twelve million dollars (\$12,000,000) and three million dollars (\$3,000,000), respectively (collectively, the "Line of Credit"), representing the maximum aggregate amount of the advances of funds from the Line of Credit that may be outstanding at any time under the Line of Credit (the "Principal Indebtedness"). ATL may draw down from the Line of Credit at any time through the day immediately preceding the third anniversary of the Effective Date (the "Maturity Date"). Interest will be payable on the outstanding Principal Indebtedness at the rate of eight percent (8%) per annum, payable semi-annually in arrears on February 12 and August 12 in each year. ATL may pre-pay in whole or in part, the Principal Indebtedness of the Line of Credit, and all interest accrued at any time prior to the Maturity Date, without penalty. Under the Agreements, in addition to certain standard covenants, we are also not permitted, without the prior written consent of AGL and Jurchen to (i) liquidate, dissolve or wind-up our business and affairs; (ii) effect any merger or consolidation transaction; (iii) sell, lease, transfer, license or otherwise dispose, in a single transaction or series of related transactions, all or substantially all of our assets; or (iv) consent to any of the foregoing. The Agreements are subject to standard events of default, which if not cured within the agreed upon cure period, permits AGL or Jurchen, as applicable, to declare the outstanding Principal Indebtedness immediately due and payable, to exercise any other remedy provided for in the Agreements or any other right available to AGL or Jurchen as provided at law or in equity. Jurchen and AGL also maintain the right to set-off during the term of the Agreements. As of the date hereof, the Company has drawn down \$0.4 million from the Line of Credit.

Sales and Purchases of Securities*Share Issuances*

During the period of March 2017 through December 2017, we issued an aggregate of 2,207,025 Ordinary Share at a purchase price of approximately \$3.90 per share, in a private placement we described as a "Series A" offering. Each investor of the Series A offering, in addition to a subscription agreement, signed a shareholder agreement, which set forth the basic governance terms of the Company, as well as our capital structure. The shareholders agreement was terminated in October 2017.

On October 13, 2017, ordinary resolutions were passed at an extraordinary general meeting of the Company approving: (i) converting 72,135,865 of authorized but unissued Ordinary Shares into 54,573,620 authorized but unissued Class A ordinary shares, par value of \$1.00 per share ("Class A Ordinary Shares") and 17,562,245 authorized but unissued Class B ordinary shares, par value of \$1.00 per share ("Class B Ordinary Shares"), respectively; (ii) converting 24,930,839 Ordinary Shares held by three shareholders into an aggregate of 2,493,085 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares; and (iii) converting 2,933,296 Ordinary Shares held by 24 shareholders into an aggregate 2,933,296 Class A Ordinary Shares. Following these issuances, we had 27 shareholders of record.

KHE Holdings Limited, which is owned by Dr. Kenny Yu's family, purchased \$200,000 Series A Notes in our private Note offering, which closed on May 15, 2018; such notes automatically converted into 28,776 Class A Ordinary Shares upon the closing of the IPO.

A total of 5,504 shares were purchased in the IPO by related persons.

Share Transfer: Change in direct substantial shareholders of the Company

On May 4, 2017, Mr. Huen transferred all of the ordinary shares in the Company he owned (in the amount of 22,307,596) to Jurchen, a company incorporated in the British Virgin Islands and wholly-owned by Mr. Huen. On October 13, 2017, the ordinary shares held by Jurchen were redesignated as 2,230,760 Class A Ordinary Shares and 20,076,836 Class B Ordinary Shares.

On March 23, 2018, Jurchen transferred 446,152 Class A Ordinary Shares and 4,015,367 Class B Ordinary Shares to CGY Investments Limited, a company incorporated in Hong Kong and which we deem Mr. Darren Lui controls and/or of which he has substantial influence on the disposition rights and voting rights of such shares. Following this transfer, Jurchen owned approximately 33% and 72% of our Class A Ordinary Shares and Class B Ordinary Shares, respectively.

Consulting Arrangements

GloboAsia, LLC

We entered into a consulting agreement with GloboAsia effective as of August 18, 2017 (the "2017 GA Agreement"); GloboAsia is not associated or affiliated with any FINRA members. However, the 2017 GA Agreement was terminated when Dr. Chan resigned from his position as our Chief Scientific Officer in March 2019. Dr. Chan serves as the Director of International Affairs of GloboAsia.

Effective as of April 1, 2019, GloboAsia, through Dr. Chan, shall serve as a member on our Scientific Advisory Board. To formalize such service, we entered into that certain consulting agreement with GloboAsia dated March 13, 2019 (the "2019 GA Agreement"). Pursuant to the 2019 GA Agreement, GloboAsia provides advisory and management services to us and as a member of the Scientific Advisory Board, they provide advice to us regarding research and development, the scientific merit of licenses or products and other related scientific issues. We agreed to pay GloboAsia an hourly rate of USD300 for work actually performed. The initial term of 2019 GA Agreement is until December 31, 2020 and shall thereafter be automatically renewed for successive one-year terms, unless earlier terminated by either party upon three months' notice prior to the end of the then applicable term; either party may also terminate the agreement upon 2 months written notice and the Company may terminate the agreement if Dr. Chan is no longer with GloboAsia or if GloboAsia commits any act of fraud or dishonesty.

Aeneas Limited and its subsidiaries ("Aeneas Group")

a. In March 2017, we entered into a new Management Agreement with Aeneas Capital Limited (the "2017 Agreement"), pursuant to which Aeneas Capital Limited will provide certain management and administrative functions, as well as investment functions related to the Company, IP acquisitions and other investor relations services (the "Services"). In consideration for the Services, we agreed to pay Aeneas HK\$500,000 per month (approximately US\$64,103 per month), payable on the last day of each month. The 2017 Agreement was terminated in July 2018. Prior to the termination, we paid Aeneas an aggregate of \$1.1 million pursuant to the terms of the 2017 Agreement.

b. On April 24, 2019, the Company signed an agreement with Aeneas Capital Limited, and A*ccelerate Technologies Pte. Ltd, the enterprise office of the Agency for Science, Technology and Research ("A*STAR"), (collectively, the "Parties") to co-create local deep tech startups. This agreement, which is part of A*ccelerate's venture co-creation ("VCC") initiative, commits all parties to the co-creation of local startups in the healthcare and life science sector (the "Master Collaboration Agreement"). Through this agreement, we partnered with A*Star to explore suitable opportunities, if identified, to set up tech ventures in Singapore over the next 5 years. A*STAR shall contribute a total of up to \$30,000,000 to any suitable startups, at their discretion. The Company and Aeneas Capital Limited will contribute a total of up to \$30,000,000 to any suitable startups at their discretion with a focus on (i) securing pilot customers; (ii) incorporation of the startups as companies and financial commitments of such customers; (iii) capital raising and capital market plans; (iv) recruiting and building of the startup teams; (v) equipment and infrastructure; and (vi) licensing of IP to the startups under the Technology License Agreements. The Master Collaboration Agreement shall continue for a period of 5 years, unless otherwise terminated or extended by the Parties.

c. On January 1, 2019, Aptus Management Limited (one of our wholly-owned subsidiaries) ("Aptus Management") entered into an Administrative consultant Services Agreement with Aeneas Management Limited (a subsidiary of Aeneas Limited). Pursuant to this agreement, Aeneas shall provide certain business and financial services to Aptus Management Limited; Aeneas shall be paid a monthly service fee of HK\$452,000 per month (approximately US\$57,949 per month), payable by the 25th day of each month during the term of the agreement, which was until December 31, 2019. Either party was able to terminate the agreement by providing 3-months written notice to the other party. On December 16, 2019, the parties agreed to renew the agreement under the same terms, but with an expiration date of December 31, 2020. The agreement was terminated on April 30, 2020.

d. On January 1, 2019, Aenco Limited ("Aenco") (a subsidiary of AGL) and Aptus Management entered into a Secondment Agreement. Pursuant to this agreement, Aenco shall assign certain of its employees to Aptus Management from time to time to assist Aptus Management with information technology development and maintenance activities for Aptus Management's affiliates; such employees shall be integrated into Aptus Management's organization only to the extent necessary to carry out such employees specific duties for Aptus Management. Aptus Management shall pay all salary and benefits up to HK\$540,000 per month (approximately US\$69,231 per month); Aenco shall be responsible for the costs associated with any employee relocation required as a result of this agreement. The agreement was originally set to terminate on December 31, 2019, although either party may terminate the agreement upon giving the other party 3-months written notice. On December 16, 2019 the parties agreed to renew the agreement under the same terms, but with an expiration date of December 31, 2020. On January 29, 2020, both parties agreed to replace the agreement no later than April 30, 2020.

On April 1, 2020, the agreement was replaced and superseded with a New Secondment Agreement. Pursuant to this New Secondment Agreement, Aenco shall assign certain of its employees to Aptus Management from time to time to assist Aptus Management with information technology application development and maintenance activities for Aptus Management's affiliates; such employees shall be integrated into Aptus Management's organization only to the extent necessary to carry out such employees specific duties for Aptus Management. Aptus Management shall pay all salary and benefits up to HK\$700,000 per month (approximately US\$89,744 per month); Aenco shall be responsible for the costs associated with any employee relocation required as a result of this agreement. The agreement shall terminate on December 31, 2020, although either party may terminate the agreement upon giving the other party 3-months written notice.

e. On 30 April 2020, Aptorum Therapeutics Limited entered into a contract research agreement with Aeneas Technology (Hong Kong) Limited ("Aeneas Technology"). Pursuant to this agreement, Aeneas Technology shall perform the research in accordance with the terms and conditions of this agreement. Aptorum Therapeutics Limited shall pay a research fee of HK\$963,760 per month (approximately US\$123,559 per month). The agreement shall terminate on 30 September 2021, although Aptorum Therapeutics Limited may terminate the agreement upon giving 30 days prior written notice.

f. In July 2019, Smart Pharmaceutical Limited Partnership, ("SPLP"), a wholly owned subsidiary of the Group, transferred 100,000,000 Smart Pharma Tokens ("SMPT token") to Aenco Solutions Limited, a related party, in exchange of the service to deal with the token creation, offering and 5-years consultancy service. The 100,000,000 SMPT tokens were equivalents to \$300,000.

Aeneas Capital Limited is wholly-owned by Aeneas Group Limited ("AGL"), which in turn is wholly-owned by Aeneas Limited ("AL"). AL is 76.8% owned by Jurchen, which is wholly-owned by Mr. Huen, our CEO. Professor Arner, one of our directors, is a Senior Regulatory and Strategic Advisor for AGL. Under his agreement with AGL dated March 12, 2018, Professor Arner shall, among other services, advise the board of AGL with its management, execution of business, and regulatory initiatives of AGL and AL, assist AGL with access to expert networks as appropriate and required. Professor Arner's compensation thereunder is HK\$234,000 per year (approximately US\$30,000 per year) and Professor Arner is entitled to participate in AGL's share option plans.

In addition, AGL was one of the selected dealers for our IPO.

CGY Investment Limited

We entered into a consulting agreement with CGY Investment Limited ("CGY") effective on January 10, 2020. Pursuant to this agreement, CGY shall provide certain consultancy, advisory, and management services to the Group on potential investment projects related to health care or R&D platform; CGY shall be paid a monthly service fee of HK\$104,000 per month (approximately US\$13,333 per month), during the term of the agreement, which is remain in effect unless it is terminated. The agreement may be terminated by either party providing 1-months written notice to the other party.

CGY is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother). Mr. Lui, President and Executive Director of the Group, controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother. Hence, 50% of the consulting service fee will be deemed as Mr. Lui's compensation.

Appointment Letters

We have entered into Appointment Letters with each of our executive officers. The terms of the Appointment Letters for each of our executive officers are consistent with each other, except with regard to the individual's compensation, term of employment and duties and responsibilities, the latter of which coincides with the standard functions normally associated with the given position. Below, we set forth the specific compensation and term of employment terms of each of our executive officer's appointment letter, as in effect as of the date hereof:

- Ian Huen - Chief Executive Officer and Executive Director- US\$24,000 (HKD187,200) per month payable in an equivalent amount of thirteen (13) months per calendar year with no set term of employment.
- Darren Lui - President and Executive Director- Mr. Lui's base salary was adjusted from \$US\$20,000 (HKD156,000) per month to US\$6,667 per month, effective as of January 10, 2020 due to his resignation as Chief Business Officer. The Company entered into a consulting agreement with CGY Investment Limited, which is 50% held by Seng Fun Yee (Mr. Lui's spouse), effective on January 10, 2020, with a monthly service fee of HK\$104,000 (approximately US\$13,333 per month).
- Dr. Clark Cheng - Chief Medical Officer and Executive Director- US\$23,275 (HKD181,542) per month payable in twelve (12) instalments per calendar year with no set term of employment. Dr. Cheng is also entitled to receive a share bonus of 5% of Aptorum Medical Limited's ordinary shares upon commencement of employment, which shall be increased by 1% annually up to a maximum additional amount of 5% of issued ordinary share capital of Aptorum Medial Limited. The Board also determined to issue Dr. Cheng a discretionary cash bonus equal to one-month of his base salary.
- Sabrina Khan - Chief Financial Officer- US\$16,333 (HKD127,400) per month payable in an equivalent amount of twelve (12) months per calendar year with no set term of employment.

- Dr. Thomas Lee Wai Yip – Head of Research & Development - US\$18,667 (HKD145,600) per month payable in an equivalent amount of thirteen (13) months per calendar year with no set term of employment.
- Dr. Angel Siu Yan Ng – Chief Operating Officer – US\$8,000 (HKD 62,400) per month payable in an equivalent amount of thirteen (13) months per calendar year with no set term of employment.

Remaining material terms of the appointment agreements are described below.

We may terminate employment for cause, at any time, without advance notice or remuneration, for certain acts of the executive officer, such as conviction or plea of guilty to a felony or any crime involving moral turpitude, negligent or dishonest acts to our detriment, or misconduct or a failure to perform agreed duties. We may also terminate an executive officer's employment without cause upon three-month advance written notice. In such case of termination by us, we will provide severance payments to the executive officer as expressly required by applicable law of the jurisdiction where the executive officer is based. The executive officer may resign at any time with three-month advance written notice.

Each executive officer has agreed to hold, both during and after the termination or expiration of his or her Appointment Letter, in strict confidence and not to use, except as required in the performance of his or her duties in connection with the employment or pursuant to applicable law, any of our confidential information or trade secrets, any confidential information or trade secrets of our clients or prospective clients, or the confidential or proprietary information of any third-party received by us and for which we have confidential obligations.

In addition, each executive officer has agreed to be bound by non-solicitation and non-compete restrictions during the term of his or her employment and typically for one year following the last date of employment. Specifically, each executive officer has agreed not to (i) solicit or entice away from the Company, any person, firm, company or organization that is or shall have been at any time within 12 months prior to termination of employee a customer, client, identified prospective customer or client of the Company or in the habit of dealing with the Company; (ii) employ, solicit or entice away from the Company any person who is or shall have been on the date of or within 12 months prior to termination of employment an employee of the Company; or (iii) assume employment with or provide services to, or otherwise engage in income generating activities with any of our competitors, or engage, whether as principal, partner, licensor or otherwise, any of our competitors, without our express consent.

Some of our Appointment Letters also provide for the executive officer to participate in our mandatory provident fund, which is similar to a pension fund.

Leased Facilities

Jurchen Investment Corporation entered into a sub-tenancy agreement with a subsidiary of the Group for the rental arrangement of an office in Hong Kong. For the period February 1, 2018 through January 31, 2021, Jurchen Investment Corporation was entitled to receive a fixed amount of rental fee of HKD130,000 (approximately \$16,667) per calendar month. In May 2020, Jurchen Investment Corporation and the Group mutually agreed to early terminate the rental agreement and returned the office on May 31, 2020.

Other Relationships

As stated elsewhere in this prospectus, Dr. Cheng serves as our Chief Medical Officer and one of our Executive Directors, who is also an Executive Director of Aptorum Medical. Dr. Cheng is also the guarantor on the AML Lease.

Our Senior Strategic Consultant, Dr. Kira Sheinerman is the Managing Director, Healthcare Investment Banking of HC Wainwright, the placement agent in this Offering.

The Bond Offering

On April 6, 2018, we entered into a subscription agreement (the “Bond Subscription Agreement”) with Peace Range Limited (“Peace Range”), a company incorporated under the laws of the British Virgin Islands and wholly-owned special purpose vehicle of Adamas Ping An Opportunities Fund L.P. Adamas Ping An Opportunities Fund L.P. is the third fund from Adamas Asset Management (HK) Limited (“Adamas”) and the first fund from the joint venture between Adamas and Yun Sheng Capital Company Limited, a subsidiary of Ping An Insurance (Group) Company of China, Limited and is advised by Ping An Capital Company Limited. Pursuant to the Bond Subscription Agreement, we issued Peace Range a \$15,000,000 convertible bond (the “Bond” and the “Bond Offering”), minus a structuring fee equal to 2% of the principal amount of the Bond, on April 25, 2018. We also agreed to pay certain expenses, up to an aggregate limit of \$250,000, incurred by Peace Range in connection with the Bond Offering. The closing of the transaction contemplated by the Bond Subscription Agreement and the issuance of the Bond are subject to standard closing conditions, which may be satisfied or waived by the impacted party. The Bond earns interest at the rate of 8% per annum, payable semi-annually. The payment of the Bond is guaranteed by our holding company, Jurchen Investment Corporation (“Jurchen”), a company wholly-owned by our CEO, Ian Huen (See “Transactions with Related Persons”), pursuant to a deed of guarantee (the “Guarantee”). In addition, the repayment of the principal of the Bond and interest payables is secured by a fund we set aside in a debt service reserve account, with the funds in the debt service reserve account to be released in an amount pro rata to the principal amount of the Bond being converted. The Bond shall mature on the twelfth calendar month following the issuance date, or with prior written consent of the holders of the Bond, the business day falling six calendar months thereafter. 10% of the principal amount of the Bond automatically converted into our Class A Ordinary Shares following the IPO; the rest of the Bond is convertible at the option of the holder commencing on the closing of the IPO until the earlier of the date falling 12 calendar months after the maturity of the Bond and the date falling 12 calendar months after the closing of the IPO. We closed the Bond Offering on April 25, 2018 and issued a Bond to Peace Range pursuant to the Bond Subscription Agreement. Pursuant to the aforementioned conversion rights, we issued an aggregate of 119,217 shares of Class A Ordinary Shares to the Bond holder after the IPO closed. Following the IPO and pursuant to the terms of the related agreements, the shares Jurchen previously submitted to be held in escrow to guarantee the payment of the Bond were released to Jurchen and the related share charge agreement and escrow agreement were terminated.

On April 24, 2019, one of our wholly owned subsidiaries, Aptorum Investment Holding Ltd., repurchased the Bonds from Peace Range. According to the amended and restated terms and conditions of the Bonds, the Bondholder was granted certain rights to subscribe for additional ordinary shares of the Company, in an amount up to the principal amount of the Bonds at a price of US\$12.17 (subject to adjustment) on or before 7 days prior to the maturity date (“Subscription Right”). The total consideration of the repurchase of Bonds and the Subscription Rights was US\$13.6 million in cash, excluding accrued interest. The Bond matured and was redeemed on October 25, 2019.

One of the underwriters in the IPO also served as a placement agent for the Bond Offering and received (i) a cash success fee of \$600,000 and (ii) warrants to purchase 67,790 Class A Ordinary Shares, at an exercise price of \$12.17 per share, subject to adjustment (the “Bond PA Warrants”). The Bond PA Warrants are exercisable on a cashless basis. China Renaissance Securities (HK) Limited (“China Renaissance”) also served as a placement agent for the Bond Offering; for such services, China Renaissance received a cash success fee of \$150,000. Prior to the commencement the IPO, Boustead assigned all such securities to a non-affiliate; the assignment is non-recourse. As of the date hereof, there are no outstanding Bond PA Warrants.

The Series A Note Offering

On May 15, 2018, we closed a private financing with certain investors (the “Series A Note Investors”) who purchased an aggregate of \$1,600,400 Series A convertible notes, at a purchase price of \$10,000 per note (the “Series A Notes”), pursuant to a note purchase agreement. Some of the Series A Note Investors are either affiliates of the Company or “related persons,” as such term is defined in Item 404 of Regulation S-K (See “Transactions with Related Persons”). We refer to this private placement transaction as the “Series A Note Offering.” The Series A Note Investors entered into a lock-up agreement, pursuant to which they agreed not to sell or otherwise transfer or dispose the Series A Notes or the Class A Ordinary Shares underlying the Series A Notes during the six-month period commencing on the date our Class A Ordinary Shares commence trading on NASDAQ Global Market, which has now expired. The Series A Notes automatically converted into 230,252 Class A Ordinary Shares at the closing of the IPO and at the commencement of trading our Class A Ordinary Shares on NASDAQ Global Market at a conversion price equal to a 56% discount to the actual price per Class A Ordinary Share (“Conversion Price”). Accordingly, the Series A Notes converted into, and we issued an aggregate of 230,252 shares of Class A Ordinary Shares after the IPO closed.

On May 15, 2018, we closed a private financing with certain investors (the “Series A Note Investors”) who purchased an aggregate of approximately \$1,600,400 Series A convertible notes, at a purchase price of \$10,000 per note (the “Series A Notes”), pursuant to a note purchase agreement. Some of the Series A Note Investors are either affiliates of the Company or “related persons” as such term is defined in Item 404 of Regulation S-K (See “Transactions with Related Persons”). We refer to this private placement transaction as the “Series A Note Offering.” The Series A Note Investors entered into a lock-up agreement, pursuant to which they agreed not to sell or otherwise transfer or dispose the Series A Notes or the Class A Ordinary Shares underlying the Series A Notes during the six-month period commencing on the date our Class A Ordinary Shares commence trading on NASDAQ Global Market. The Series A Notes automatically converted into Class A Ordinary Shares at the closing of the IPO at a conversion price equal to a 56% discount to the actual price per Class A Ordinary Share (“Conversion Price”). Accordingly, the Series A Notes converted into, and we issued an aggregate of 230,252 shares of Class A Ordinary Shares after the IPO closed.

One of the underwriters in the IPO also served as a placement agent for the Series A Note Offering and received: (i) a cash success fee of \$68,516 and (ii) warrants to purchase 12,663 Class A Ordinary Shares, at an exercise price of \$6.95 per share, subject to adjustment (the “Series A Note PA Warrants”). The Series A Note PA Warrants are also exercisable on a cashless basis, at the holder’s discretion. As of the date hereof, there are no outstanding Series A Note PA Warrants.

Registered Direct Offering

On February 28, 2020, we closed a Registered Direct Offering with certain non-affiliated institutional investors (the “Non-affiliated Purchasers”) and Juchen Investment Corporation, our largest shareholder and wholly owned by Mr. Ian Huen, our Chief Executive Officer (the “Affiliated Purchaser” collectively with the Non-affiliated Purchasers, the “Purchasers”). The Purchasers purchased an aggregate of 1,351,350 Class A Ordinary Shares and warrants (“Warrants”) to purchase 1,351,350 Class A Ordinary Shares (the “Offering”), for gross proceeds of approximately \$10 million. The Warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. The purchase price for each Share and the corresponding Warrant is \$7.40.

We agreed that we would not issue any Class A Ordinary Shares (or Class A Ordinary Share Equivalents (as defined in the purchase agreement entered on February 25, 2020)) for 45 days following the closing of the Registered Direct Offering subject to certain customary exceptions, including, without limitation, issuances of restricted securities to consultants or employees of the Company, share option grants and issuances pursuant to existing outstanding securities and issuance in connection with strategic acquisition.

We agreed from the date of the purchase agreement until the date that is the later of (i) the 12 month anniversary of the closing date or (ii) one or more subsequent issuance by the Company or any of its subsidiaries of ordinary share equivalent having aggregate gross proceeds of at least \$20,000,000, the Purchasers shall have the right to participate in the subsequent financing up to an amount equal to 50% of the Subsequent Financing (the “Participation Maximum”) on the same terms, conditions and price provided for in the Subsequent Financing.

We also agreed certain most favored nation treatment of the all the Purchasers pursuant to which each Purchaser will have the opportunity to automatically have the same benefit if the terms and conditions with respect to this Purchase Agreement or any securities offered therein the Company offered to the other Purchasers are more favorable.

Placement Agents

In connection with the Purchaser Warrant Exchange, we paid the Placement Agent \$212,500 in fees (\$25,000 of which was for non-accountable expenses and \$50,000 of which was for legal and other fees).

Employment Agreements

See “Appointment Letters” above.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership, within the meaning of Rule 13d-3 under the Exchange Act, of our Ordinary Shares as of September 11, 2020.

- each of our directors and executive officers who beneficially own our Ordinary Shares; and
- each person known to us to own beneficially more than 5.0% of our Ordinary Shares.

Beneficial ownership includes voting or investment power with respect to the securities. Except as indicated below, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all Ordinary Shares shown as beneficially owned by them. Percentage of beneficial ownership owned before the Offering of each listed person is based on 8,491,526 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares outstanding as of the date of this prospectus. The percentage of beneficial ownership owned after the Offering is based on [●] Class A Ordinary Shares and 22,437,754 Class B ordinary Shares outstanding after we close on the maximum offering amount.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of 5% or more of our Ordinary Shares. Beneficial ownership is determined in accordance with the rules of the SEC and generally requires that such person have voting or investment power with respect to securities. In computing the number of Ordinary Shares beneficially owned by a person listed below and the percentage ownership of such person, Ordinary Shares underlying options, warrants or convertible securities held by each such person that are exercisable or convertible within 60 days of the date of this prospectus are deemed outstanding, but are not deemed outstanding for computing the percentage ownership of any other person. Except as otherwise indicated in the footnotes to this table, or as required by applicable community property laws, all persons listed have sole voting and investment power for all Ordinary Shares shown as beneficially owned by them. As of the date of the prospectus, we have 3 shareholders of record holding beneficial ownership of 5% or more, none of which are located in the United States.

Unless otherwise indicated, the business address of each of the individuals is 17 Hanover Square, London W1S 1BN, United Kingdom.

Name and Address of Beneficial Owner	Class A Ordinary Shares Beneficially Owned	Class B Ordinary Shares Beneficially Owned	Percentage of Total Class A and Class B Ordinary Shares ⁽¹⁾	Percentage of Total Voting Power Before the Offering ⁽²⁾	Percentage of Total Voting Power After the Offering ⁽²⁾
Ian Huen ⁽³⁾	2,865,742	16,061,469	61.20%	70.20%	[] %
Darren Lui ⁽⁴⁾	260,809	2,141,333	7.77%	9.31%	[] %
Clark Cheng ⁽⁵⁾	*	-	*	*	[] %
Sabrina Khan ⁽⁶⁾	*	-	*	*	[] %
Thomas Lee Wai Yip ⁽⁷⁾	*	-	*	*	[] %
Angel Ng Siu Yan ⁽⁸⁾	*	-	*	*	[] %
Charles Bathurst ⁽⁹⁾	*	-	*	*	[] %
Mirko Scherer ⁽¹⁰⁾	*	-	*	*	[] %
Justin Wu ⁽¹¹⁾	207,566	-	0.67%	0.09%	[] %
Douglas Arner ⁽¹²⁾	*	-	*	*	[] %
All directors and executive officers as a group (10 persons)	3,334,117	18,202,802	69.63%	79.60%	[] %
5% Beneficial Owner					
Jurchen Investment Corporation ⁽³⁾	2,855,688	16,061,469	61.16%	70.20%	[] %
Sui Fong Isabel Huen Ng ⁽¹³⁾	211,986	1,907,870	6.85%	8.28%	[] %
CGY Investments Limited ⁽¹⁴⁾	471,809	4,015,367	14.51%	17.45%	[] %

* Less than 1%.

(1) For each person and group included in this column, percentage ownership is calculated by dividing the number of Class A Ordinary Shares and Class B Ordinary Shares beneficially owned by such person or group, including shares that such person or group has the right to acquire within 60 days after the date of this prospectus, by the sum of total Class A Ordinary Shares and Class B Ordinary Shares. Following the IPO, each Class B Ordinary Share can be converted at any time on a one-for-one basis into Class A Ordinary Shares at the discretion of the holder.

- (2) For each person and group included in this column, percentage of total voting power represents voting power based on both Class A Ordinary Shares and Class B Ordinary Shares beneficially owned by such person or group with respect to all of our outstanding Class A Ordinary Shares and Class B Ordinary Shares as one single class. Holders of Class A Ordinary Shares are entitled to one vote per share and holders of Class B Ordinary Shares are entitled to ten votes per share on all matters subject to a shareholders' vote.
- (3) Includes 2,315,148 Class A Ordinary Shares owned by Jurchen, warrants held by Jurchen to purchase 540,540 Class A Ordinary Shares, options granted to Mr. Huen to purchase 10,054 Class A Ordinary Shares, and 16,061,469 Class B Ordinary Shares owned by Jurchen. Jurchen Investment Corporation, is a company wholly-owned by Mr. Huen. Mr. Huen maintains sole voting control over the shares held by Jurchen, the principal office address of which is at 17th Floor, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong. Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 20,107 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Mr. Huen pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus.
- (4) Includes (i) 14,850 Class A Ordinary Shares and 133,649 Class B Ordinary Shares indirectly owned through DSF Investment Holdings Limited ("DSF"). DSF holds 50,339 Class A Ordinary Shares and 453,048 Class B Ordinary Shares of the Company and is 29.5% held by Mr. Lui; Eternal Clarity Holdings Limited, which is wholly-owned by Mr. Lui's mother, Ms. Emily Woo, owns the remaining 70.5% of DSF. DSF is located at Flat A2, 11th Floor, Wing Hang Insurance Building, 11 Wing Kut Street, Hong Kong. (ii) 235,905 Class A Ordinary Shares and 2,007,684 Class B Ordinary Shares indirectly owned through CGY Investments Limited, which is 50% held by Seng Fun Yee (Mr. Lui's spouse) and holds 471,809 Class A Ordinary Shares and 4,015,367 Class B Ordinary Shares of the Company. CGY Investments Limited is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother). The principal business address of CGY Investments are Unit A 3/F Cheong Sun Tower, 116-118 Wing Lok St, Sheung Wan, Hong Kong, and (iii) options granted to Mr. Lui to purchase 10,054 Class A Ordinary Shares. Mr. Lui only controls and/or has substantial influence on the disposition and voting rights of 29.5% of the Aptorum shares DSF owns; Mr. Lui controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother regarding the CGY shares. Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to CGY Investments Limited, of which 50% is deemed controlled by Mr. Lui, and 20,107 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to CGY Investments Limited, of which 50% is deemed controlled by Mr. Lui pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus.
- (5) Pursuant to his appointment letter, Dr. Cheng received a stock bonus of 7% of Aptorum Medical Limited's ordinary shares as of the date of this prospectus. Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 20,107 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Dr. Cheng pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus.
- (6) Does not include 4,749 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 54,627 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 9,498 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Miss Khan pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus.

- (7) Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 20,107 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Dr. Lee pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .
- (8) Does not include 775 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 8,027 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 1,551 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Dr. Ng pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .
- (9) Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 2,011 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Mr. Bathurst pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .
- (10) Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 2,011 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Mr. Scherer pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .
- (11) Includes (i) 129,589 Class A Ordinary Shares held by Chi Ling Lily Heung, the wife of Dr. Wu, (ii) 76,971 Class A Ordinary Shares held by Dr. Wu, and (iii) options granted to Dr. Wu to purchase 1,006 Class A Ordinary Shares. Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 2,011 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Dr. Wu pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .
- (12) Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019, 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 2,011 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to Dr. Arner pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .
- (13) Sui Fong Isabel Huen Ng is the mother of Mr. Ian Huen. Mr. Ian Huen does not have control nor substantial influence on the disposition and voting rights of the shares held by his mother.
- (14) CGY Investments Limited is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother). The principal business address of CGY Investments are Unit A 3/F Cheong Sun Tower, 116-118 Wing Lok St, Sheung Wan, Hong Kong. Mr. Lui controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother. Does not include 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 and 20,107 Class A Ordinary Shares issuable upon exercise of outstanding options issued on June 1, 2020 to CGY Investments Limited pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of the date of this prospectus .

SHARES ELIGIBLE FOR FUTURE SALE

Future sales of substantial amounts of our Class A Ordinary Shares, including shares issued upon exercise of outstanding options and warrants, in the public market after this Offering could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through the sale of our equity securities.

Upon the completion of this Offering, based on the number of shares outstanding as of [●], 2020, we will have [●] Class A Ordinary Shares outstanding. Of these outstanding shares, all of the [●] Class A Ordinary Shares sold in this Offering will be freely tradable, except that any shares purchased by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

The remaining outstanding shares will be deemed restricted securities as defined under Rule 144. Restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under Rule 144 or Rule 701 promulgated under the Securities Act, which rules are summarized below. In addition, all of our shareholders have entered into market standoff agreements with us or lock-up as further described in “— Lock-Up Agreements” below, under which they agreed not to sell their shares until certain time or performance metrics have been met. Subject to the provisions of Rule 144 or Rule 701, shares are or will be available for sale in the public market as follows:

- on the date of this prospectus, [●] Class A Ordinary Shares (including all shares sold in this Offering) are available for sale in the public market, except for the shares purchased by affiliates which are subject to the volume and other restrictions of Rule 144 as well as the lock-up agreement restrictions described below;
- the remainder of the shares will be eligible for sale in the public market from time to time thereafter, subject in some cases to the volume and other restrictions of Rule 144, as described below.

Rule 144

In general, under Rule 144 as currently in effect, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person is entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, under Rule 144, as currently in effect, our affiliates are entitled to sell upon expiration of the lock-up agreements described above, within any three-month period beginning 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

- 1% of the number of shares then outstanding, which will equal approximately [●] shares immediately after this offering; or
- The average weekly trading volume of the shares during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales under Rule 144 by our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 generally allows a shareholder who purchased ordinary shares pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information and holding period requirements of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144.

Registration Rights

We have granted registration rights and right to participate to placement agent and certain of our shareholders. For a further description of these rights, see “Description of Share Capital — Registration Rights” and “Transactions with Related Persons — Registered Direct Offering.”

DESCRIPTION OF SHARE CAPITAL

We are a Cayman Islands exempted company with limited liability and our affairs are governed by our Memorandum and Articles, the Companies Law, the common law of the Cayman Islands, our corporate governance documents and rules and regulations of the stock exchange on which are shares are traded.

As of the date hereof, the authorized share capital of the Company is \$100,000,000, consisting of 60,000,000 Class A Ordinary Shares, par value \$1.00 each and 40,000,000 Class B Ordinary Shares, par value \$1.00 each. As of the date hereof, 8,491,526 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares are issued and outstanding. All of our issued and outstanding Class A Ordinary Shares and Class B Ordinary Shares are fully paid.

Shares

The following are summaries of material provisions of our Memorandum and Articles, corporate governance policies and the Companies Law insofar as they relate to the material terms of our Class A Ordinary Shares and Class B Ordinary Shares (our class B Ordinary Shares are not registered pursuant to Section 12(b), 12(g) or Section 15(d) of the Act, but we are voluntarily including information with respect to same in this exhibit).

Objects of Our Company

Under our Memorandum and Articles, the objects of our Company are unrestricted and we have the full power and authority to carry out any object not prohibited by the law of the Cayman Islands.

Share Capital

Our authorized share capital is divided into Class A Ordinary Shares and Class B Ordinary Shares. Holders of our Class A Ordinary Shares and Class B Ordinary Shares will have the same rights except for voting rights and conversion rights.

The holders of Class A Ordinary Shares are entitled to one vote for each such share held and shall be entitled to notice of any shareholders' meeting, and, subject to the terms of Memorandum and Articles, to vote thereat. The Class A Ordinary Shares are not redeemable at the option of the holder and are not convertible into shares of any other class.

The holders of Class B Ordinary Shares shall have the right to ten votes for each such share held, and shall be entitled to notice of any shareholders' meeting and, subject to the terms of the Memorandum and Articles, to vote thereat. The Class B Ordinary Shares are not redeemable at the option of the holder but are convertible into Class A Ordinary Shares at any time after issue at the option of the holder on a one to one basis.

Dividends

The holders of our Class A Ordinary Shares and Class B Ordinary Shares are entitled to such dividends as may be declared by our Board of Directors subject to the Companies Law and to our Memorandum and Articles.

Voting Rights

In respect of all matters subject to a shareholders' vote, each Class B Ordinary Share is entitled to ten votes, and each Class A Ordinary Share is entitled to one vote, voting together as one class. Voting at any shareholders' meeting is by show of hands unless a poll is demanded by the chairman or persons holding certain amounts of shares as set forth in the Memorandum and Articles. Actions that may be taken at a general meeting also may be taken by a unanimous resolution of the shareholders in writing.

No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business; two members present in person or by proxy, one of whom shall be the holder of the majority of the shares in the Company, shall be a quorum provided always that if the Company has one member of record the quorum shall be that one member present in person or by proxy. An ordinary resolution to be passed at a general meeting requires the affirmative vote of a simple majority of the votes cast, while a special resolution requires the affirmative vote of at least two-thirds of votes cast at a general meeting. A special resolution will be required for important matters.

A special resolution of members is required to change the name of the Company, approve a merger, wind up the Company, amend the Memorandum and Articles and reduce the share capital.

Conversion

Class A Ordinary Shares are not convertible. Each Class B Ordinary Share shall be convertible, at the option of the holder thereof, into such number of fully paid and non-assessable Class A Ordinary Shares on the basis that one Class B Ordinary Share shall be converted into one Class A Ordinary Share (being a 1:1 ratio and hereafter referred to as the “**Conversion Rate**”), subject to adjustment.

Transfer of Shares

Subject to the restrictions set out below, any of our shareholders may transfer all or any of his, its or her Class A Ordinary Shares or Class B Ordinary Shares by an instrument of transfer in the usual or common form or any other form approved by our Board of Directors or in a form prescribed by the stock exchange on which our shares are then listed.

Our Board of Directors may, in its sole discretion, decline to register any transfer of any Class A Ordinary Shares or Class B Ordinary Shares whether or not it is fully paid up to the total consideration paid for such shares. Our directors may also decline to register any transfer of any Class A Ordinary Shares or Class B Ordinary Shares if (a) the instrument of transfer is not accompanied by the certificate covering the shares to which it relates or any other evidence as our Board of Directors may reasonably require to prove the title of the transferor to, or his/her right to transfer the shares; or (b) the instrument of transfer is in respect of more than one class of shares.

If our directors refuse to register a transfer, they shall, within two months after the date on which the instrument of transfer was lodged, send to the transferee notice of such refusal.

The registration of transfers may be suspended and the register closed at such times and for such periods as our Board of Directors may from time to time determine, provided, however, that the registration of transfers shall not be suspended nor the register closed for more than 30 days in any year.

Winding-Up/Liquidation

On a return of capital on winding up or otherwise (other than on conversion, redemption or purchase of shares), a liquidator may be appointed to determine how to distribute the assets among the holders of the Class A Ordinary Shares and Class B Ordinary Shares. If our assets available for distribution are insufficient to repay all of the paid-up capital, the assets will be distributed so that the losses are borne by our shareholders proportionately; a similar basis will be employed if the assets are more than sufficient to repay the whole of the capital at the commencement of the winding up.

Calls on Shares and Forfeiture of Shares

Our Board of Directors may from time to time make calls upon shareholders for any amounts unpaid on their Class A Ordinary Shares or Class B Ordinary Shares in a notice served to such shareholders at least 14 days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid on the specified time are subject to forfeiture.

Redemption of Shares

We may issue shares on terms that are subject to redemption, at our option or at the option of the holders, on such terms and in such manner as may be determined by our Board of Directors.

Variations of Rights of Shares

All or any of the special rights attached to any class of shares may, be varied with the resolution of at least two thirds of the issued shares of that class or a resolution passed at a general meeting of the holders of the shares of that class present in person or by proxy or with the consent in writing of the holders of at least two-thirds of the issued shares of that class.

Inspection of Books and Records

Directors shall from time to time determine whether and to what extent and at what times and places and under what conditions or regulations the accounts and books of the Company or any of them shall be open to the inspection of members not being Directors and no member (not being a Director) shall have any right of inspecting any account or book or document of the Company except as conferred by Companies Law or authorized by the Directors or by the Company in a general meeting. However, the Directors shall from time to time cause to be prepared and to be laid before the Company in a general meeting, profit and loss accounts, balance sheets, group accounts (if any) and such other reports and accounts as may be required by Companies Law.

Issuance of Additional Shares

Our Memorandum and Articles authorize our Board of Directors to issue additional Class A Ordinary Shares or Class B Ordinary Shares from time to time as our Board of Directors shall determine, to the extent there are available authorized but unissued shares.

Our Memorandum and Articles also authorizes our Board of Directors to establish from time to time one or more series of preferred shares and to determine, subject to compliance with the variation of rights of shares provision in the Memorandum and Articles, with respect to any series of preferred shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our Board of Directors may, issue preferred shares without action by our shareholders to the extent there are authorized but unissued shares available. Issuance of additional shares may dilute the voting power of holders of Class A Ordinary Shares and Class B Ordinary Shares. However, our Memorandum of Association provides for authorized share capital comprising Class A Ordinary Shares and Class B Ordinary Shares and to the extent the rights attached to any class may be varied, the Company must comply with the provisions in the Memorandum and Articles relating to variations to rights of shares.

Anti-Takeover Provisions

Some provisions of our Memorandum and Articles may discourage, delay or prevent a change of control of our Company or management that shareholders may consider favorable, including provisions that:

- authorize our Board of Directors to issue preferred shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preferred shares without any further vote or action by our shareholders (subject to variation of rights of shares provisions in our Memorandum and Articles); and
- limit the ability of shareholders to requisition and convene general meetings of shareholders. Our Memorandum and Articles allow our shareholders holding shares representing in aggregate not less than ten percent of our paid up share capital (as to the total consideration paid for such shares) in issue to requisition an extraordinary general meeting of our shareholders, in which case our directors are obliged to call such meeting and to put the resolutions so requisitioned to a vote at such meeting.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our Memorandum and Articles for a proper purpose and for what they believe in good faith to be in the best interests of our Company.

General Meetings of Shareholders and Shareholder Proposals

Our shareholders' general meetings may be held in such place within or outside the Cayman Islands as our Board of Directors considers appropriate.

As a Cayman Islands exempted company, we are not obliged by the Companies Law to call shareholders' annual general meetings. However, our Memorandum and Articles provide that we shall hold a general meeting in each year as our annual general meeting other than the year in which the Memorandum and Articles were adopted at such time and place as determined by the directors. The directors may, whenever they think fit, convene an extraordinary general meeting.

Shareholders' annual general meetings and any other general meetings of our shareholders may be convened by a majority of our Board of Directors. Our Board of Directors shall give not less than seven days' written notice of a shareholders' meeting to those persons whose names appear as members in our register of members on the date the notice is given (or on any other date determined by our directors to be the record date for such meeting) and who are entitled to vote at the meeting.

Cayman Islands law provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our Memorandum and Articles allow our shareholders holding shares representing in aggregate not less than ten percent of our paid up share capital (as to the total consideration paid for such shares) in issue to requisition an extraordinary general meeting of our shareholders, in which case our directors are obliged to call such meeting and to put the resolutions so requisitioned to a vote at such meeting; otherwise, our Memorandum and Articles do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

Exempted Company

We are an exempted company with limited liability under the Companies Law. The Companies Law distinguishes between ordinary resident companies and exempted companies. A Cayman Islands exempted company:

- is a company that conducts its business mainly outside of the Cayman Islands;
- is exempted from certain requirements of the Companies Law, including the filing an annual return of its shareholders with the Registrar of Companies or the Immigration Board;
- does not have to make its register of members open for inspection;
- does not have to hold an annual general meeting;
- may issue negotiable or bearer shares or shares with no par value (subject to the provisions of the Companies Law);
- may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 20 years in the first instance); and
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands.

"Limited liability" means that the liability of each shareholder is limited to the amount unpaid by the shareholder on the shares of the company (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

Register of Members

Under Cayman Islands law, we must keep a register of members and there should be entered therein:

- the names and addresses of the members, a statement of the shares held by each member, and of the amount paid or agreed to be considered as paid, on the shares of each member;
- the date on which the name of any person was entered on the register as a member; and
- the date on which any person ceased to be a member.

Under Cayman Islands law, the register of members of our Company is prima facie evidence of the matters set out therein (i.e. the register of members will raise a presumption of fact on the matters referred to above unless rebutted) and a member registered in the register of members is deemed as a matter of Cayman Islands law to have legal title to the shares as set against its name in the register of members. Once our register of members has been updated, the shareholders recorded in the register of members are deemed to have legal title to the shares set against their name.

If the name of any person is incorrectly entered in, or omitted from, our register of members, or if there is any default or unnecessary delay in entering on the register the fact of any person having ceased to be a member of our Company, the person or member aggrieved (or any member of our Company or our Company itself) may apply to the Cayman Islands Grand Court for an order that the register be rectified, and the Court may either refuse such application or it may, if satisfied of the justice of the case, make an order for the rectification of the register.

Indemnification of Directors and Executive Officers and Limitation of Liability

Cayman Islands law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. Our Memorandum and Articles require us to indemnify our officers and directors for actions, proceedings, claims, losses, damages, costs, liabilities and expenses ("Indemnified Losses") incurred in their capacities as such unless such Indemnified Losses arise from dishonesty of such directors or officers. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Pre-Funded Warrants

The following summary of certain terms and provisions of the pre-funded warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of pre-funded warrant, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrant for a complete description of the terms and conditions of the pre-funded warrants.

Duration and Exercise Price

Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.01. The pre-funded warrants will be immediately exercisable and will expire when exercised in full. Each pre-funded warrant is exercisable for one Class A Ordinary Share. The exercise price and number of Class A Ordinary Shares issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our Class A Ordinary Shares and the exercise price.

Exercisability

The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of Class A Ordinary Shares purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the pre-funded warrant to the extent that the holder would own more than 4.99% of the outstanding Class A Ordinary Shares immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of beneficial ownership of outstanding Class A Ordinary Shares after exercising the holder's pre-funded warrants up to 9.99% of the number of Class A Ordinary Shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. Purchasers of pre-funded warrants in this offering may also elect prior to the issuance of the pre-funded warrants to have the initial exercise limitation set at 9.99% of our outstanding Class A Ordinary Shares.

Cashless Exercise

If, at the time a holder exercises its pre-funded warrants, a registration statement registering the issuance of the Class A Ordinary Shares underlying the pre-funded warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of Class A Ordinary Shares determined according to a formula set forth in the pre-funded warrants.

Transferability

Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer.

Fractional Shares

No fractional Class A Ordinary Shares will be issued upon the exercise of the pre-funded warrants. Rather, the number of Class A Ordinary Shares to be issued will be rounded to the nearest whole number.

Trading Market

There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system. The Class A Ordinary Shares issuable upon exercise of the pre-funded warrants are currently listed on the Nasdaq Capital Market.

Right as a Shareholder

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of Class A Ordinary Shares, the holders of the pre-funded warrants do not have the rights or privileges of holders of our Class A Ordinary Shares, until they exercise their pre-funded warrants. The pre-funded warrants will provide that holders have the right to participate in distributions or dividends paid on our Class A Ordinary Shares.

Fundamental Transaction

In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our ordinary shares, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding Class A Ordinary Shares, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding Class A Ordinary Shares, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction.

Differences in Corporate Law

The Companies Law is modeled after that of English law but does not follow many recent English law statutory enactments. In addition, the Companies Law differs from laws applicable to United States corporations and their shareholders. Set forth below is a summary of some of the significant differences between the provisions of the Companies Law applicable to us and the laws applicable to companies incorporated in the State of Delaware.

Mergers and Similar Arrangements. The Companies Law permits mergers and consolidations between Cayman Islands companies and between Cayman Islands companies and non-Cayman Islands companies. For these purposes, a “merger” means the merging of two or more constituent companies and the vesting of their undertaking, property and liabilities in one of such companies as the surviving company, and a “consolidation” means the combination of two or more constituent companies into a consolidated company and the vesting of the undertaking, property and liabilities of such companies to the consolidated company.

In order to effect a merger or consolidation, the directors of each constituent company must approve a written plan of merger or consolidation, which must then be authorized by a special resolution of the shareholders of each constituent company, and such other authorization, if any, as may be specified in such constituent company’s articles of association.

The plan of merger or consolidation must be filed with the Registrar of Companies of the Cayman Islands together with a declaration as to: the solvency of the consolidated or surviving company, the merger or consolidation being bona fide and not intended to defraud creditors, no petition or other proceeding, order or resolution to wind up the Company, no receiver, administrator or similar having been appointed over assets or property and no scheme or other arrangement having been entered into with creditors; a list of the assets and liabilities of each constituent company and an undertaking that a copy of the certificate of merger or consolidation will be given to the members and creditors of each constituent company; and that notification of the merger and consolidation will be published in the Cayman Islands Gazette. The non-surviving constituent company must have resigned from any fiduciary office held or will do so and each constituent company having complied with any applicable regulatory laws. Dissenting shareholders have the right to be paid the fair value of their shares if they follow the required procedures under the Companies Law subject to certain exceptions. The fair value of the shares will be determined by the Cayman Islands court if it cannot be agreed among the parties. Court approval is not required for a merger or consolidation effected in compliance with these statutory procedures.

In addition, there are statutory provisions that facilitate the reconstruction and amalgamation of companies, provided that the arrangement is approved by a majority in number of each class of shareholders and creditors with whom the arrangement is to be made, and who must in addition represent three-fourths in value of each such class of shareholders or creditors, as the case may be, that are present and voting either in person or by proxy at a meeting, or meetings, convened for that purpose. The convening of the meetings and subsequently the arrangement must be sanctioned by the Grand Court of the Cayman Islands.

While a dissenting shareholder has the right to express to the court the view that the transaction ought not to be approved, the court can be expected to approve the arrangement if it determines that:

- the statutory provisions as to the required majority vote have been met;
- the shareholders have been fairly represented at the meeting in question;
- the arrangement is such that an intelligent and honest man of that class acting in respect of his interest would reasonably approve; and
- the arrangement is not one that would more properly be sanctioned under some other provision of the Companies Law or that would amount to a “fraud on the minority.”

When a take-over offer is made and accepted by holders of not less than 90% of the shares within four months, the offer, or may, within a two-month period commencing on the expiration of such four months period, require the holders of the remaining shares to transfer such shares on the terms of the offer. An objection can be made to the Grand Court of the Cayman Islands but this is unlikely to succeed unless there is evidence of fraud, bad faith or collusion.

If the arrangement and reconstruction is thus approved, the dissenting shareholder would have no rights comparable to appraisal rights, which would otherwise ordinarily be available to dissenting shareholders of United States corporations, providing rights to receive payment in cash for the judicially determined value of the shares.

Shareholders' Suits. In principle, we will normally be the proper plaintiff to sue for a wrong done to us as a company and as a general rule a derivative action may not be brought by a minority shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority in the Cayman Islands, there are exceptions to the foregoing principle, including when:

- a company acts or proposes to act illegally or ultra vires and is therefore incapable of ratification by the shareholders;
- the act complained of, although not ultra vires, could only be duly effected if authorized by more than a simple majority vote that has not been obtained; and
- those who control the company are perpetrating a "fraud on the minority."

Indemnification of Directors and Executive Officers and Limitation of Liability. The Companies Law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. As stated above, our Memorandum and Articles permit indemnification of officers and directors for actions, proceedings, claims, losses, damages, costs, liabilities and expenses ("Indemnified Losses") incurred in their capacities as such unless such losses or damages arise from dishonesty of such directors or officers. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Directors' Fiduciary Duties. Under Delaware corporate law, a director of a Delaware corporation has a fiduciary duty to the corporation and its shareholders. This duty has two components: the duty of care and the duty of loyalty. The duty of care requires that a director act in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself of, and disclose to shareholders, all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director acts in a manner he reasonably believes to be in the best interests of the corporation. He must not use his corporate position for personal gain or advantage. This duty prohibits self-dealing by a director and mandates that the best interest of the corporation and its shareholders take precedence over any interest possessed by a director, officer or controlling shareholder and not shared by the shareholders generally. In general, actions of a director are presumed to have been made on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the corporation. However, this presumption may be rebutted by evidence of a breach of one of the fiduciary duties. Should such evidence be presented concerning a transaction by a director, the director must prove the procedural fairness of the transaction, and that the transaction was of fair value to the corporation. As a matter of Cayman Islands law, a director of a Cayman Islands company is in the position of a fiduciary with respect to the company and therefore it is considered that he or she owes the following duties to the company: a duty to act bona fide in the best interests of the company, a duty not to make a profit based on his or her position as director (unless the company permits him or her to do so) and a duty not to put himself or herself in a position where the interests of the company conflict with his or her personal interest or his or her duty to a third-party. Our Memorandum and Articles do not disqualify a director from acting or from contacting with the Company as a vendor, purchaser or otherwise provided that it does not adversely affect his or her performance of duties or responsibilities and the nature of the interest is disclosed at the meeting at which the contract or arrangement is considered (if not previously disclosed), and having disclosed such interest the director is not counted in the quorum and must refrain from voting on the contract or arrangement. A director of a Cayman Islands company also owes to the company a duty to exercise the powers for the purpose for which they were given and the duty to act with skill and care. It was previously considered that a director need not exhibit in the performance of his or her duties a greater degree of skill than may reasonably be expected from a person of his or her knowledge and experience. However, courts are moving towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands.

Shareholder Action by Written Consent. Under the Delaware General Corporation Law, a corporation may eliminate the right of shareholders to act by written consent by amendment to its certificate of incorporation, Cayman Islands law and our Memorandum and Articles provide that shareholders may approve corporate matters by way of a unanimous written resolution signed by or on behalf of each shareholder who would have been entitled to vote on such matter at a general meeting without a meeting being held.

Shareholder Proposals. Under the Delaware General Corporation Law, a shareholder has the right to put any proposal before the annual meeting of shareholders, provided it complies with the notice provisions in the governing documents. A special meeting may be called by the board of directors or any other person authorized to do so in the governing documents, but shareholders may be precluded from calling special meetings. The Companies Law provides shareholders with only limited rights to requisition a general meeting and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in articles of association. Our Memorandum and Articles allow our shareholders holding not less than 1/10 of all voting power of our (paid up) share capital in issue to requisition a shareholder's meeting. Other than this right to requisition a shareholders' meeting, our Memorandum and Articles do not provide our shareholders other rights to put proposal before a meeting. As an exempted Cayman Islands company, we are not obliged by law to call shareholders' annual general meetings although our Memorandum and Articles provide for same.

Cumulative Voting. Under the Delaware General Corporation Law, cumulative voting for elections of directors is not permitted unless the corporation's certificate of incorporation specifically provides for it. Cumulative voting potentially facilitates the representation of minority shareholders on a board of directors since it permits the minority shareholder to cast all the votes to which the shareholder is entitled on a single director, which increases the shareholder's voting power with respect to electing such director. There are no prohibitions in relation to cumulative voting under the Companies Law but our Memorandum and Articles do not provide for cumulative voting.

Removal of Directors. Under the Delaware General Corporation Law, a director of a corporation with a may be removed with the approval of a majority of the outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under our Memorandum and Articles, directors may be removed with or without cause, by the directors or by an ordinary resolution of our shareholders.

Transactions with Interested Shareholders. The Delaware General Corporation Law contains a business combination statute applicable to Delaware corporations whereby, unless the corporation has specifically elected not to be governed by such statute by amendment to its certificate of incorporation, it is prohibited from engaging in certain business combinations with an "interested shareholder" for three years following the date that such person becomes an interested shareholder. An interested shareholder generally is a person or a group who or which owns or owned 15% or more of the target's outstanding voting share within the past three years. This has the effect of limiting the ability of a potential acquirer to make a two-tiered bid for the target in which all shareholders would not be treated equally. The statute does not apply if, among other things, prior to the date on which such shareholder becomes an interested shareholder, the board of directors approves either the business combination or the transaction which resulted in the person becoming an interested shareholder. This encourages any potential acquirer of a Delaware corporation to negotiate the terms of any acquisition transaction with the target's board of directors. The Cayman Islands has no comparable statute. As a result, we cannot avail ourselves of the types of protections afforded by the Delaware business combination statute. However, although Cayman Islands law does not regulate transactions between a company and its significant shareholders, it does provide that such transactions must be entered into bona fide in the best interests of the company and for a proper corporate purpose and not with the effect of constituting a fraud on the minority shareholders. Our Memorandum and Articles, as well as our Code of Business Conduct and Ethics that applies to our officers, directors and employees outlines how to handle these types of transactions and other potential conflicts of interest.

Dissolution; Winding up. Under the Delaware General Corporation Law, unless the board of directors approves the proposal to dissolve, dissolution must be approved by shareholders holding 100% of the total voting power of the corporation. Only if the dissolution is initiated by the board of directors may it be approved by a simple majority of the corporation's outstanding shares. Delaware law allows a Delaware corporation to include in its certificate of incorporation a supermajority voting requirement in connection with dissolutions initiated by the board. Under the Companies Law, a company may be wound up by either an order of the courts of the Cayman Islands or by a special resolution of its members or, if the company is unable to pay its debts as they fall due, by an ordinary resolution of its members. The court has authority to order winding up in a number of specified circumstances including where it is, in the opinion of the court, just and equitable to do so. Under the Companies Law a company may be dissolved, liquidated or wound up by a special resolution of our shareholders; however, under our Memorandum and Articles, only our Directors have power to present a winding up petition in the name of the Company and/or to apply for the appointment of provisional liquidators in respect of the Company.

Variation of Rights of Shares. Under the Delaware General Corporation Law, a corporation may vary the rights of a class of shares with the approval of a majority of the outstanding shares of such class, unless the certificate of incorporation provides otherwise. Under the Companies Law and our Memorandum and Articles, if our share capital is divided into more than one class of shares, we may vary the rights attached to any class with the written consent of the holders of two-thirds of the issued shares of that class or with the sanction of a special resolution passed at a separate general meeting of the holders of the shares of that class.

Amendment of Governing Documents. Under the Delaware General Corporation Law, a corporation's governing documents may be amended with the approval of a majority of the outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. As permitted by the Companies Law, each of our Memorandum of Association and Articles of Association may only be amended with a special resolution of our shareholders.

Rights of Non-resident or Foreign Shareholders. There are no limitations imposed by our Memorandum and Articles on the rights of non-resident or foreign shareholders to hold or exercise voting rights on our shares. In addition, there are no provisions in our Memorandum and Articles governing the ownership threshold above which shareholder ownership must be disclosed.

Rule 144

Shares Held for Six Months

In general, under Rule 144 as currently in effect, and subject to the terms of any lock-up agreement, commencing 90 days after the closing of the IPO, a person (or persons whose shares are aggregated), including an affiliate, who has beneficially owned our Class A Ordinary Shares for six months or more, including the holding period of any prior owner other than one of our affiliates (i.e., commencing when the shares were acquired from our Company or from an affiliate of our Company as restricted securities), is entitled to sell our shares, subject to the availability of current public information about us. In the case of an affiliate shareholder, the right to sell is also subject to the fulfillment of certain additional conditions, including manner of sale provisions and notice requirements, and to a volume limitation that limits the number of shares to be sold thereby, within any three-month period, to the greater of:

- 1% of the number of Class A Ordinary Shares then outstanding; or
- the average weekly trading volume of our Class A Ordinary Shares on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

The six-month holding period of Rule 144 does not apply to sales of unrestricted securities. Accordingly, persons who hold unrestricted securities may sell them under the requirements of Rule 144 described above without regard to the six-month holding period, even if they were considered our affiliates at the time of the sale or at any time during the 90 days preceding such date.

Shares Held by Non-Affiliates for One Year

Under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who is not considered to have been one of our affiliates at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than one of our affiliates, is entitled to sell his, her or its shares under Rule 144 without complying with the provisions relating to the availability of current public information or with any other conditions under Rule 144. Therefore, unless subject to a lock-up agreement or otherwise restricted, such shares may be sold immediately upon the closing of the IPO.

Registration Rights

Pursuant to the terms of their engagement, we agreed to register the Class A Ordinary Shares underlying the Placement Agent's Warrants in this Registration Statement.

PLAN OF DISTRIBUTION

Pursuant to an engagement agreement, dated August 17, 2020, we have engaged H.C. Wainwright & Co., LLC (the "Placement Agent") to act as our exclusive placement agent in connection with this offering. The Placement Agent is not purchasing or selling any such securities, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of such securities, other than to use its "reasonable best efforts," to arrange for the sale of such securities by us. The terms of this offering are subject to market conditions and negotiations between us, the Placement Agent, and prospective investors. The engagement agreement does not give rise to any commitment by the Placement Agent to purchase any of our securities, and the Placement Agent will have no authority to bind us by virtue of the engagement agreement. Further, the Placement Agent does not guarantee that it will be able to raise new capital in any prospective offering. The Placement Agent may engage sub-agents or selected dealers to assist with the offering.

We will enter into a securities purchase agreement directly with institutional investors, at such investor's option, which purchase our securities in this offering, providing such investors with certain representations, warranties and covenants from us, which representations, warranties and covenants will not be available to other investors which do not enter into a securities purchase agreement. Investors which do not enter into a securities purchase agreement shall rely solely on this prospectus in connection with the purchase of our securities in the offering.

We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. We expect to deliver the securities being offered pursuant to this prospectus on or about [], 2020.

Fees and Expenses

The following table show the total placement agent fees we will pay in connection with the sale of the securities in this offering, assuming the purchase of all of the securities we are offering.

	Per Class A Ordinary Share	Per Pre-Funded Warrant
Placement Agent Fees		
Total		

We have agreed to pay to the Placement Agent a cash fee equal to 7.0% of the aggregate gross proceeds raised in this offering.

We estimate the total expenses payable by us for this offering to be approximately \$[], which amount includes (i) a Placement Agent's fee of \$[], assuming the purchase of all of the securities we are offering; (ii) the management fee of \$[] (equal to 1.0% of the aggregate gross proceeds raised in this offering); (iii) a \$50,000 non-accountable expense allowance payable to the Placement Agent; (iv) reimbursement of the accountable expenses of the Placement Agent equal to \$100,000, including the legal fees of the Placement Agent being paid by us (none of which has been paid in advance); (v) the Placement Agent's clearing expenses in the amount of \$12,900 in connection with this offering; and (vi) other estimated expenses of approximately \$[] which include legal, accounting, printing costs and various fees associated with the registration and listing of our shares. In addition, we have agreed to issue the Placement Agent's Warrants to the Placement Agent. See "Placement Agent's Warrants" below for additional detail.

Placement Agent's Warrants

We have agreed to issue to the Placement warrants to purchase 7.0% of the number of Class A Ordinary Shares (including the Class A Ordinary Shares issuable upon exercise of the pre-funded warrants) being sold in this offering. The Placement Agent's Warrants will have a term of five years from the effective date of this prospectus and an exercise price per Class A Ordinary Share equal to \$[] per share, which represents 125% of the public offering price for the Class A Ordinary Shares sold in this offering. Pursuant to FINRA Rule 5110(g), the Placement Agent's Warrants and any shares issued upon exercise of the Placement Agent's Warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in the offering and the officers or partners thereof; if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the Placement Agent or related persons does not exceed 1.0% of the securities being offered; (iv) that is beneficially owned on a pro rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

Right to Participate

We have also granted the Placement Agent, a right to participate for a period of one year from the closing of this offering. Under this right to participate, if, from the date hereof until the 12-month anniversary following consummation of this offering, the Company or any of its subsidiaries decides to among other things, raise funds by means of a public offering (including at-the-market facility) or a private placement or any other capital-raising financing of equity, equity-linked or debt securities using an underwriter or placement agent, the Placement Agent shall have the right to act as sole book-running manager, sole underwriter or sole placement agent for such financing. If the Placement Agent decides to accept any such engagement, the agreement governing such engagement will contain, among other things, provisions for customary fees for transactions of similar size and nature, including indemnification, which are appropriate to such a transaction.

Tail Financing Payments

The Placement Agent will be entitled to compensation as set forth above, with respect to any public or private offering or other financing or capital-raising transaction of any kind ("Tail Financing") to the extent that such financing or capital is received by the Company from (i) in connection with a public offering, investors whom the Placement Agent had contacted during the term of our engagement agreement with the Placement Agent or introduced to the Company during such term, or (ii) in connection with a non-public offering, investors whom the Placement Agent had brought over-the-wall during such term, if such Tail Financing is consummated at any time within the 12-month period following the expiration or termination of our engagement agreement with the Placement Agent and a list of such investors is provided to the Company as promptly as practicable following the expiration or termination of our engagement agreement with the Placement Agent.

Lock-Up Agreement

We have agreed with the Placement Agent to be subject to a lock-up period of [] days following the date of closing of the offering pursuant to this prospectus. This means that, during the applicable lock-up period, we may not issue, enter into any agreement to issue or announce the issuance or proposed issuance of any Class A Ordinary Shares or their equivalents, subject to certain exceptions. The placement agent may waive the terms of these lock-up agreements in its sole discretion and without notice.

Each of our officers and directors have also agreed with the Placement Agent to be subject to a lock-up period of 90 days following the date of closing of the offering pursuant to this prospectus. This means that, during the lock-up period, such persons may not offer for sale, contract to sell, sell, distribute, grant any option, right or warrant to purchase, pledge, hypothecate or otherwise dispose of, directly or indirectly, any Class A Ordinary Shares or any securities convertible into, or exercisable or exchangeable for, our Class A Ordinary Shares. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions. The placement agent may waive the terms of these lock-up agreements in its sole discretion and without notice.

Listing

Our Class A Ordinary Shares are listed on the Nasdaq Global Market under the symbol “APM”. We do not plan to list the pre-funded warrants or the Placement Agent’s Warrants on the Nasdaq Global Market or any other securities exchange or trading market.

Indemnification

We have agreed to indemnify the Placement Agent and specified other persons against some civil liabilities, including liabilities under the Securities Act, and the Securities Exchange Act of 1934, as amended, or the Exchange Act, and to contribute to payments that the Placement Agent may be required to make in respect of such liabilities.

Regulation M

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act and any fees received by it and any profit realized on the sale of the securities by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. The Placement Agent will be required to comply with the requirements of the Securities Act and the Exchange Act including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the Placement Agent. Under these rules and regulations, the Placement Agent may not (i) engage in any stabilization activity in connection with our securities; and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

Other Relationships

In connection with the Purchaser Warrant Exchange, we paid the Placement Agent \$212,500 in fees (\$25,000 of which was for non-accountable expenses and \$50,000 of which was for legal and other fees).

From time to time, the Placement Agent has provided and may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which it has and may receive customary fees and commissions. However, except as disclosed in this prospectus, we have no present arrangements with the Placement Agent for any services.

TAXATION

The following summary contains a description of certain Cayman Islands and U.S. federal income tax consequences of the acquisition, ownership and disposition of Class A Ordinary Shares. Please note that this summary should not be considered a comprehensive description of all the tax considerations that may be relevant to the decision to purchase Class A Ordinary Shares. The summary is based upon the tax laws of the Cayman Islands and regulations thereunder and on the tax laws of the United States and regulations thereunder as of the date hereof, which are subject to change.

Cayman Islands Tax Considerations

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or brought within, the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties which are applicable to any payments made by or to our Company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of our Class A Ordinary Shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of our Class A Ordinary Shares, nor will gains derived from the disposal of our Class A Ordinary Shares be subject to Cayman Islands income or corporation tax.

No stamp duty is payable in respect of the issue of our Class A Ordinary Shares or on an instrument of transfer in respect of our Class A Ordinary Shares except on instruments executed in, or brought within, the jurisdiction of the Cayman Islands.

Material U.S. Federal Income Tax Considerations for U.S. Holders

The following is a description of the material U.S. federal income tax consequences to U.S. Holders (as defined below) of purchasing, owning and disposing of Class A Ordinary Shares. It is not a comprehensive description of all U.S. federal income tax considerations that may be relevant to a particular person's decision to acquire Class A Ordinary Shares. This discussion applies only to a U.S. Holder that holds a Class A Ordinary Share as a capital asset for U.S. federal income tax purposes (generally, property held for investment). In addition, it does not describe all of the tax consequences that may be relevant in light of a U.S. Holder's particular circumstances, including state and local tax consequences, non-U.S. tax consequences, federal estate or gift tax consequences, alternative minimum tax consequences, the potential application of the provisions of the Code known as the Medicare Contribution Tax, and tax consequences applicable to U.S. Holders subject to special rules, such as:

- banks and other financial institutions;
- insurance companies;
- dealers or traders in securities who use a mark-to-market method of tax accounting;
- persons holding Class A Ordinary Shares as part of a hedging transaction, "straddle," wash sale, conversion transaction or integrated transaction or persons entering into a constructive sale with respect to the Class A Ordinary Shares;
- persons whose "functional currency" for U.S. federal income tax purposes is not the U.S. dollar;
- tax exempt entities, including "individual retirement accounts" and "Roth IRAs";
- former citizens or long-term residents of the United States;

- entities or arrangements classified as partnerships for U.S. federal income tax purposes;
- regulated investment companies or real estate investment trusts;
- persons who acquired our Class A Ordinary Shares pursuant to the exercise of an employee share option or otherwise as compensation;
- persons that own or are deemed to own ten percent or more of our shares; and
- persons holding Class A Ordinary Shares in connection with a trade or business conducted outside the United States.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds Class A Ordinary Shares, the U.S. federal income tax treatment of such partnership and each partner thereof will generally depend on the status of the partner and the activities of the partnership. Partnerships holding Class A Ordinary Shares and partners in such partnerships are encouraged to consult their tax advisors as to the particular U.S. federal income tax consequences of purchasing, holding and disposing of Class A Ordinary Shares.

The discussion is based on the Code, the Treasury Regulations issued thereunder, and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect, or to different interpretation. Such change could materially and adversely affect the tax consequences described below.

For purposes of this discussion, a “U.S. Holder” is a holder who, for U.S. federal income tax purposes, is a beneficial owner of Class A Ordinary Shares and that is:

- (1) an individual citizen or resident of the United States;
- (2) a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia;
- (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- (4) a trust, (i) if a court within the United States is able to exercise primary supervision over its administration and one or more “U.S. persons” (within the meaning of the Code) have the authority to control all of its substantial decisions, or (ii) if a valid election is in effect for the trust to be treated as a U.S. person.

U.S. Holders are encouraged to consult their tax advisors concerning the U.S. federal, state, local and foreign tax consequences of purchasing, owning and disposing of Class A Ordinary Shares in their particular circumstances.

Taxation of Distributions

Subject to the discussion below under “Passive Foreign Investment Company Rules,” a U.S. Holder will be required to include in gross income as dividend income the gross amount of any distributions paid on Class A Ordinary Shares (including any amount of taxes withheld), other than certain *pro rata* distributions of Class A Ordinary Shares, to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current and accumulated earnings and profits would be treated as a non-taxable return of capital to the extent of the U.S. Holder’s adjusted tax basis in the Class A Ordinary Shares and thereafter as a gain from the sale of the Class A Ordinary Shares. However, because we do not calculate our earnings and profits under U.S. federal income tax principles, we expect that distributions generally will be reported to U.S. Holders as dividends.

In case of a U.S. Holder that is a corporation, dividends paid on the Class A Ordinary Shares will be subject to regular corporate rates and will not be eligible for the “dividends received” deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations.

Dividends received by an individual, trust or estate will be subject to taxation at standard tax rates. A reduced income tax rate applies to dividends paid by a “qualified foreign corporations” (if certain holding period requirements and other conditions are met). A non-U.S. corporation generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which includes an exchange of information program or (ii) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. US Treasury Department guidance indicates that our Class A Ordinary Shares, which will be listed on the NASDAQ Global Market will be readily tradable on an established securities market in the United States. There can be no assurance, however, that our Class A Ordinary Shares will be considered readily tradable on an established securities market in later years.

Non-corporate U.S. Holders will not be eligible for reduced rates of taxation on any dividends received from us if we are a PFIC in the taxable year in which such dividends are paid or in the preceding taxable year (see “Passive Foreign Investment Company Rules” below).

A U.S. Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any foreign withholding taxes imposed on dividends received on the Class A Ordinary Shares. A U.S. Holder who does not elect to claim a foreign tax credit for foreign income tax withheld may instead claim a deduction for U.S. federal income tax purposes in respect of such withholding, but only for a year in which such investor elects to do so for all creditable foreign income taxes. For purposes of calculating the foreign tax credit limitation, dividends paid by us will, depending on the circumstances of the U.S. Holder, be either general or passive income.

While we do not expect to pay dividends in the near future, in the event any dividends are paid and if a dividend is paid in non-U.S. currency, it must be included in a U.S. Holder’s income as a U.S. dollar amount based on the exchange rate in effect on the date such dividend is actually or constructively received, regardless of whether the dividend is in fact converted into U.S. dollars. If the dividend is converted to U.S. dollars on the date of receipt, a U.S. Holder generally will not recognize a foreign currency gain or loss. If the non-U.S. currency is converted into U.S. dollars on a later date, however, the U.S. Holder must include in income any gain or loss resulting from any exchange rate fluctuations. Such gain or loss will generally be ordinary income or loss and will be from sources within the United States for foreign tax credit limitation purposes. U.S. Holders should consult their own tax advisors regarding the tax consequences to them if we pay dividends in non-U.S. currency.

Sale or Other Taxable Disposition of Shares

Subject to the discussion below under “Passive Foreign Investment Company Rules,” gain or loss realized on the sale or other taxable disposition of Class A Ordinary Shares will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the Class A Ordinary Shares for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder’s tax basis in the Class A Ordinary Shares disposed of and the amount realized on the disposition. Long-term capital gain of a non-corporate U.S. Holder is generally taxed at preferential rates. This gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. The deductibility of capital losses is subject to limitations. U.S. Holders are urged to consult their tax advisors regarding the tax consequences if a foreign tax is imposed on the disposition of Class A Ordinary Shares, including the availability of the foreign tax credit under an investor’s own particular circumstances.

A U.S. Holder that receives non-U.S. currency on the disposition of the Class A Ordinary Shares will realize an amount equal to the U.S. dollar value of the foreign currency received on the date of disposition (or in the case of cash basis and electing accrual basis taxpayers, the settlement date) whether or not converted into U.S. dollars at that time. Very generally, the U.S. Holder will recognize currency gain or loss if the U.S. dollar value of the currency received on the settlement date differs from the amount realized with respect to the Class A Ordinary Shares. Any currency gain or loss on the settlement date or on any subsequent disposition of the foreign currency generally will be U.S.-source ordinary income or loss.

Exercise of a Pre-funded Warrant

A U.S. Holder generally will not recognize taxable gain or loss on the acquisition of Class A Ordinary Shares upon exercise of a pre-funded warrant. The U.S. Holder's aggregate tax basis in the share of our Class A Ordinary Shares received upon exercise of a pre-funded warrant generally will be an amount equal to the sum of the U.S. Holder's tax basis in the pre-funded warrant prior to exercise and the warrant's exercise price. Provided that a pre-funded warrant is treated as our Class A Ordinary Shares, a U.S. Holder's holding period for the Class A Ordinary Shares received upon exercise of a warrant will include the holding period for the pre-funded warrant. On the other hand, if the pre-funded warrant is treated as an option to purchase our stock, a U.S. Holder's holding period for the Class A Ordinary Shares received upon exercise of a warrant will begin on the date following the date of exercise of the warrant and will not include the period during which the U.S. Holder held the warrant.

A U.S. Holder may be permitted to undertake a cashless exercise of pre-funded warrants into our Class A Ordinary Shares. The U.S. federal income tax treatment of a cashless exercise is unclear, and the tax consequences of a cashless exercise could differ from the consequences of an exercise described above. For example, the cashless exercise could be treated as a taxable disposition of a portion of the Warrants or the common shares into which they are exercisable. U.S. Holders should consult their own tax advisors regarding the U.S. federal income tax consequences of a cashless exercise.

Passive Foreign Investment Company Rules

Special U.S. federal income tax rules apply to a U.S. Holder that holds stock in a foreign corporation classified as a PFIC for U.S. federal income tax purposes. In general, a non-U.S. corporation will be classified as a PFIC for any taxable year in which, after applying certain look-through rules, either:

- at least 75% of its gross income for such taxable year is passive income (e.g., dividends, interest, capital gains and rents derived other than in the active conduct of a rental business); or
- at least 50% of its gross assets (determined on the basis of a quarterly average) is attributable to assets that produce passive income or are held for the production of passive income.

We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the equity.

A separate determination must be made after the close of each taxable year as to whether we are a PFIC for that year. As a result, our PFIC status may change. In particular, the total value of our assets generally will be calculated using the market price of our Class A Ordinary Shares, which may fluctuate considerably. Fluctuations in the market price of our Class A Ordinary Shares may result in our being a PFIC for any taxable year.

Due to the amount of restricted and unrestricted cash that we had on hand during our year ending December 31, 2018 and 2017, we believe that we were classified as a PFIC for that tax year. Depending on the future composition and value of our assets, we may be classified as a PFIC for future years.

If we were to be classified as a PFIC, a U.S. Holder would be subject to different taxation rules depending on whether the U.S. Holder (i) takes no action, (ii) makes an election to treat us as a "Qualified Electing Fund" (a "QEF election") or (iii) if permitted, makes a "mark-to-market" election with respect to our Class A Ordinary Shares. A U.S. Holder of our Class A Ordinary Shares will also be required under applicable Treasury Regulations to file an annual information return (Form 8621) containing information regarding our company. Additional explanations of the PFIC rules are set forth below: this material is complex and may affect different U.S. Holders differently. Accordingly, U.S. Holders should consult their own tax advisors about the consequences of our company being classified as a PFIC and about what steps, if any, they might take to lessen the tax impact of our PFIC status on them.

A U.S. Holder who does not make a timely QEF or mark-to-market election (a "Non-Electing Holder,"), as discussed below, will be subject to special tax rules with respect to any "excess distribution" that you receive and any gain you realize from a sale or other disposition (including a pledge) of Class A Ordinary Shares. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for the Class A Ordinary Shares will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for the Class A Ordinary Shares;
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we became a PFIC, will be treated as ordinary income; and
- the amount allocated to each other year will be subject to the highest tax rate in effect for that year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

It should be noted that, until such time as we make a distribution, there are no tax consequences to Non-Electing Holders. However, if we ever did make a distribution it would in all likelihood be an excess distribution (because we would not have previously made any distributions to holders of Class A Ordinary Shares). At that point, and for all subsequent distributions, the rules described above would apply to Non-Electing Holders. The tax liability for amounts allocated to years prior to the year of disposition or "excess distribution" cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the Class A Ordinary Shares cannot be treated as capital, even if you hold the Ordinary Shares as capital assets.

Certain elections may be available that would result in alternative treatments. The adverse consequences of owning stock in a PFIC could be mitigated if a U.S. Holder makes a valid QEF election (a U.S. Holder which we refer to as an "Electing Holder") which, among other things, would require the Electing Holder to include currently in income its pro rata share of the PFIC's net capital gain and ordinary earnings, if any, for our taxable year that ends with or within the taxable year of the Electing Holder, regardless of whether or not the Electing Holder actually received distributions from us. When an Electing Holder makes a QEF election, its adjusted tax basis in our Class A Ordinary Shares is increased to reflect taxed but undistributed earnings and profits. Distributions of earnings and profits that had been previously taxed will result in a corresponding reduction in the adjusted tax basis in our Class A Ordinary Shares and will not be taxed again once distributed. An Electing Holder would generally recognize capital gain or loss on the sale, exchange or other disposition of our Class A Ordinary Shares.

A U.S. Holder can make a QEF election with respect to any year that we are a PFIC by filing IRS Form 8621 with its U.S. federal income tax return. This election must be made by the deadline (including extensions) for filing the U.S. Holder's federal tax return for the year in question. U.S. Holders should discuss their election alternatives with their own tax advisors. Once an election is made, the Electing Holder is subject to the QEF rules for as long as we are a PFIC.

It should be noted that in order to make a QEF election a U.S. Holder needs information from us concerning our PFIC status and our financial results for the year. We cannot assure our U.S. Holders that we will provide such information.

As an alternative to making a QEF election, a U.S. Holder may make a "mark-to-market" election with respect to our Class A Ordinary Shares provided our Class A Ordinary Shares are treated as "marketable stock." The Class A Ordinary Shares generally will be treated as marketable stock if they are regularly traded on a "qualified exchange or other market" (within the meaning of applicable Treasury Regulations) on at least 15 days during each calendar quarter (other than in de minimis amounts).

If a U.S. Holder makes an effective mark-to-market election, for each taxable year that we are a PFIC, the U.S. Holder will include as ordinary income the excess of the fair market value of its Class A Ordinary Shares at the end of the year over its adjusted tax basis in the Class A Ordinary Shares. You will be entitled to deduct as an ordinary loss in each such year the excess of your adjusted tax basis in the Class A Ordinary Shares over their fair market value at the end of the year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. A U.S. Holder's adjusted tax basis in the Class A Ordinary Shares will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. In addition, upon the sale or other disposition of your Class A Ordinary Shares in a year that we are PFIC, any gain will be treated as ordinary income and any loss will be treated as ordinary loss, but only to the extent of the net amount of previously included income as a result of the mark-to-market election.

If a U.S. Holder makes a mark-to-market election, it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the Class A Ordinary Shares are no longer regularly traded on a qualified exchange or other market, or the IRS consents to the revocation of the election. You are urged to consult your tax advisor about the availability of the mark-to-market election, and whether making the election would be advisable in your particular circumstances.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the IRS.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders may be required to report information relating to the Class A Ordinary Shares, subject to certain exceptions (including an exception for Class A Ordinary Shares held in accounts maintained by certain U.S. financial institutions). U.S. Holders should consult their tax advisors regarding their reporting obligations with respect to their purchase, ownership and disposition of the Class A Ordinary Shares.

EXPENSES OF THIS OFFERING

Set forth below is an itemization of our total expenses, which are expected to be incurred in connection with the offer and sale of the Class A Ordinary Shares by us. With the exception of the SEC registration fee, all amounts are estimates.

Securities and Exchange Commission registration fee	\$	[•]
Legal fees and expenses	\$	[•]
Other professional fees	\$	[•]
Total	\$	[•]

LEGAL MATTERS

The validity of the Class A Ordinary Shares being offered by this prospectus and other legal matters relating to Cayman Islands law will be passed upon for us by Campbells. Certain legal matters with respect to the United States federal securities law and New York law will be passed upon for us by Hunter Taubman Fischer & Li LLC, New York, New York. The placement agent is being represented by Ellenoff Grossman & Schole LLP, New York, New York.

EXPERTS

The consolidated balance sheets (successor basis) as of December 31, 2019 and 2018, the related consolidated statements (successor basis) of operations and comprehensive loss, equity and cash flows for each of the two years in the period ended December 31, 2019, and the period March 1, 2017 through December 31, 2017, and the statements (predecessor basis) of operations, changes in net assets, and cash flows for the period January 1, 2017 through February 28, 2017 incorporated by reference in this prospectus have been audited by Marcum Bernstein & Pinchuk LLP, an independent registered public accounting firm ("Marcum"), as set forth in their report thereon, included therein, and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing. The consolidated financial statements for the six months ended June 30, 2020 incorporated herein by reference are not audited.

ENFORCEMENT OF CIVIL LIABILITIES

We are incorporated under the laws of the Cayman Islands as an exempted company with limited liability. We incorporated in the Cayman Islands because of certain benefits associated with being a Cayman Islands corporation, such as political and economic stability, an effective judicial system, a favorable tax system, the absence of foreign exchange control or currency restrictions and the availability of professional and support services. However, the Cayman Islands have a less developed body of securities laws that provide significantly less protection to investors as compared to the securities laws of the United States. In addition, Cayman Islands companies may not have standing to sue before the federal courts of the United States.

All of our assets are located outside the United States. In addition, some of our directors and officers are residents of jurisdictions other than the United States and all or a substantial portion of their assets are located outside the United States. As a result, it may be difficult for investors to effect service of process within the United States upon us or our directors and officers, or to enforce against us or them judgments obtained in United States courts, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state in the United States.

According to our local Cayman Islands' counsel, there is uncertainty with regard to Cayman Islands law relating to whether a judgment obtained from the United States, United Kingdom or Hong Kong courts under civil liability provisions of the securities laws will be determined by the courts of the Cayman Islands as penal or punitive in nature. If such a determination is made, the courts of the Cayman Islands will not recognize or enforce the judgment against a Cayman Islands' company. The courts of the Cayman Islands in the past determined that disgorgement proceedings brought at the instance of the Securities and Exchange Commission are penal or punitive in nature and such judgments would not be enforceable in the Cayman Islands. Other civil liability provisions of the securities laws may be characterized as remedial, and therefore enforceable but the Cayman Islands' Courts have not yet ruled in this regard. Our Cayman Islands' counsel has further advised us that a final and conclusive judgment in the federal or state courts of the United States under which a sum of money is payable other than a sum payable in respect of taxes, fines, penalties or similar charges, may be subject to enforcement proceedings as a debt in the courts of the Cayman Islands.

As of the date of this prospectus, no treaty or other form of reciprocity exists between the Cayman Islands and United Kingdom and/or Hong Kong governing the recognition and enforcement of judgments.

Cayman Islands' counsel further advised that although there is no statutory enforcement in the Cayman Islands of judgments obtained in the United States, United Kingdom or Hong Kong, a judgment obtained in such jurisdictions will be recognized and enforced in the courts of the Cayman Islands at common law, without any re-examination of the merits of the underlying dispute, by an action commenced on the foreign judgment debt in the Grand Court of the Cayman Islands, provided such judgment (1) is given by a foreign court of competent jurisdiction, (2) imposes on the judgment debtor a liability to pay a liquidated sum for which the judgment has been given, (3) is final, (4) is not in respect of taxes, a fine or a penalty, and (5) was not obtained in a manner and is of a kind the enforcement of which is contrary to natural justice or the public policy of the Cayman Islands.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-1 under the Securities Act relating to this Offering of our Class A Ordinary Shares. This prospectus does not contain all of the information contained in the registration statement. The rules and regulations of the SEC allow us to omit certain information from this prospectus that is included in the registration statement. Statements made in this prospectus concerning the contents of any contract, agreement or other document are summaries of all material information about the documents summarized, but are not complete descriptions of all terms of these documents. If we filed any of these documents as an exhibit to the registration statement, you may read the document itself for a complete description of its terms.

You may read and copy the registration statement, including the related exhibits and schedules, and any document we file with the SEC without charge at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC also maintains an Internet website that contains reports and other information regarding issuers that file electronically with the SEC. Our filings with the SEC are also available to the public through the SEC's website at <http://www.sec.gov>.

We are subject to the information reporting requirements of the Exchange Act that are applicable to foreign private issuers, and under those requirements file reports with the SEC. Those other reports or other information may be inspected without charge at the locations described above. As a foreign private issuer, we will be exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders will be exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. However, we will file with the SEC, within 120 days after the end of each fiscal year, or such applicable time as required by the SEC, an annual report on Form 20-F containing financial statements audited by an independent registered public accounting firm, and will submit to the SEC, on Form 6-K, unaudited interim financial information for the first six months of each fiscal year.

We maintain a corporate website at www.aporumgroup.com. Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information into this document. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this document, except for any information superseded by information that is included directly in this document.

This prospectus incorporates by reference the documents listed below:

- (1) our Report on [Form 6-K](#) furnished with the Commission on September 2, 2020, which contains Management’s Discussion and Analysis of Financial Condition and Results of Operations and the unaudited interim condensed consolidated financial statements and related notes thereto for the Company, as of and for the six months ended June 30, 2020;
- (2) our Report on [Form 6-K](#) furnished with the Commission on September 1, 2020;
- (3) our Report on [Form 6-K](#) furnished with the Commission on August 27, 2020;
- (4) our Report on [Form 6-K](#) furnished with the Commission on August 20, 2020;
- (5) our Report on [Form 6-K](#) furnished with the Commission on July 24, 2020;
- (6) our Report on [Form 6-K](#) furnished with the Commission on July 17, 2020;
- (7) our Report on [Form 6-K](#) furnished with the Commission on June 29, 2020;
- (8) our Report on [Form 6-K](#) furnished with the Commission on May 13, 2020;
- (9) our Annual Report on [Form 20-F](#) for the fiscal year ended December 31, 2019, filed with the SEC on April 29, 2020, which contains our audited consolidated financial statements for the most recent fiscal year for which those statements have been filed;
- (10) the description of our Ordinary Shares contained in our Registration Statement on [Form 8-A](#) filed with the SEC on December 14, 2018, including any amendments and reports filed for the purpose of updating such description.

We will provide a copy of the documents we incorporate by reference, at no cost, to any person who receives this prospectus. To request a copy of any or all of these documents, you should write or telephone us at 17 Hanover Square, London W1S 1BN, United Kingdom, Attention: Sabrina Khan, Chief Financial Officer, +44 020 80929299. Additionally, copies of the documents incorporated herein by reference may be accessed at our website at www.aptorumgroup.com. The reference to our website address does not constitute incorporation by reference of the information contained on or accessible through our website, and you should not consider the contents of our website in making an investment decision with respect to our Class A Ordinary Shares.



Aptorum Group Limited

Up to [] Class A Ordinary Shares

or

Up to [] Pre-Funded Warrants to Purchase Class A Ordinary Shares and
(and [] Class A Ordinary Shares Issuable Upon Exercise of the Pre-Funded Warrants)

PRELIMINARY PROSPECTUS

H.C. Wainwright & Co.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 6. Indemnification of Directors, Officers and Employees.

Cayman Islands law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. Our Memorandum and Articles permit indemnification of officers and directors for losses, damages, costs and expenses incurred in their capacities as such unless such losses or damages arise from dishonesty of such directors or officers. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the Securities and Exchange Commission, or the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 7. Recent Sales of Unregistered Securities.

During the past three years, we have issued the following securities. We believe that each of the following issuances was exempt from registration under Section 4(a)(2) of the Securities Act regarding transactions not involving a public offering and/or Regulation S promulgated thereunder regarding offshore offers and sales.

The Bond Offering

On April 6, 2018, we entered into a subscription agreement (the "Bond Subscription Agreement") with Peace Range Limited ("Peace Range"), a company incorporated under the laws of the British Virgin Islands and wholly-owned special purpose vehicle of Adamas Ping An Opportunities Fund L.P. Adamas Ping An Opportunities Fund L.P. is the third fund from Adamas Asset Management (HK) Limited ("Adamas") and the first fund from the joint venture between Adamas and Yun Sheng Capital Company Limited, a subsidiary of Ping An Insurance (Group) Company of China, Limited and is advised by Ping An Capital Company Limited. Pursuant to the Bond Subscription Agreement, we issued Peace Range a \$15,000,000 convertible bond (the "Bond" and the "Bond Offering"), minus a structuring fee equal to 2% of the principal amount of the Bond, on April 25, 2018. We also agreed to pay certain expenses, up to an aggregate limit of \$250,000, incurred by Peace Range in connection with the Bond Offering. The closing of the transaction contemplated by the Bond Subscription Agreement and the issuance of the Bond are subject to standard closing conditions, which may be satisfied or waived by the impacted party. The Bond earns interest at the rate of 8% per annum, payable semi-annually. The payment of the Bond is guaranteed by our holding company, Jurchen Investment Corporation ("Jurchen"), a company wholly-owned by our CEO, Ian Huen, pursuant to a deed of guarantee (the "Guarantee"). In addition, the repayment of the principal of the Bond and interest payables is secured by a fund we set aside in a debt service reserve account, with the funds in the debt service reserve account to be released in an amount pro rata to the principal amount of the Bond being converted. The Bond shall mature on the twelfth calendar month following the issuance date, or with prior written consent of the holders of the Bond, the business day falling six calendar months thereafter. 10% of the principal amount of the Bond automatically converted into our Class A Ordinary Shares following the IPO; the rest of the Bond is convertible at the option of the holder commencing on the closing of the IPO until the earlier of the date falling 12 calendar months after the maturity of the Bond and the date falling 12 calendar months after the closing of the IPO. We closed the Bond Offering on April 25, 2018 and issued a Bond to Peace Range pursuant to the Bond Subscription Agreement. Pursuant to the aforementioned conversion rights, we issued an aggregate of 119,217 shares of Class A Ordinary Shares to the Bond holder after the IPO closed. Following the IPO and pursuant to the terms of the related agreements, the shares Jurchen previously submitted to be held in escrow to guarantee the payment of the Bond were released to Jurchen and the related share charge agreement and escrow agreement were terminated.

On April 24, 2019, one of our wholly owned subsidiaries, Aptorum Investment Holding Ltd., repurchased the Bonds from Peace Range. According to the amended and restated terms and conditions of the Bonds, the Bondholder was granted certain rights to subscribe for additional ordinary shares of the Company, in an amount up to the principal amount of the Bonds at a price of US\$12.17 (subject to adjustment) on or before 7 days prior to the maturity date ("Subscription Right"). The total consideration of the repurchase of Bonds and the Subscription Rights was US\$13.6 million in cash, excluding accrued interest. The Bond matured and was redeemed on October 25, 2019.

One of the underwriters in the IPO also served as a placement agent for the Bond Offering and received (i) a cash success fee of \$600,000 and (ii) warrants to purchase 67,790 Class A Ordinary Shares, at an exercise price of \$12.17 per share, subject to adjustment (the "Bond PA Warrants"). The Bond PA Warrants are exercisable on a cashless basis. China Renaissance Securities (HK) Limited ("China Renaissance") also served as a placement agent for the Bond Offering; for such services, China Renaissance received a cash success fee of \$150,000. Prior to the commencement the IPO, Boustead assigned all such securities to a non-affiliate; the assignment is non-recourse. As of the date hereof, there are no outstanding Bond PA Warrants.

The Series A Note Offering

On May 15, 2018, we closed a private financing with certain investors (the "Series A Note Investors") who purchased an aggregate of approximately \$1,600,400 Series A convertible notes, at a purchase price of \$10,000 per note (the "Series A Notes"), pursuant to a note purchase agreement. Some of the Series A Note Investors are either affiliates of the Company or "related persons" as such term is defined in Item 404 of Regulation S-K. We refer to this private placement transaction as the "Series A Note Offering." The Series A Note Investors entered into a lock-up agreement, pursuant to which they agreed not to sell or otherwise transfer or dispose the Series A Notes or the Class A Ordinary Shares underlying the Series A Notes during the six-month period commencing on the date our Class A Ordinary Shares commence trading on NASDAQ Global Market. The Series A Notes automatically converted into Class A Ordinary Shares at the closing of the IPO at a conversion price equal to a 56% discount to the actual price per Class A Ordinary Share ("Conversion Price"). Accordingly, the Series A Notes converted into, and we issued an aggregate of 230,252 shares of Class A Ordinary Shares after the IPO closed.

One of the underwriters in the IPO also served as a placement agent for the Series A Note Offering and received: (i) a cash success fee of \$68,516 and (ii) warrants to purchase 12,663 Class A Ordinary Shares, at an exercise price of \$6.95 per share, subject to adjustment (the "Series A Note PA Warrants"). The Series A Note PA Warrants are also exercisable on a cashless basis, at the holder's discretion. As of the date hereof, there are no outstanding Series A Note PA Warrants.

Credit Agreements and Promissory Notes

On August 13, 2019 (the "Effective Date"), Aptorum Therapeutics Limited ("ATL"), one of our wholly-owned subsidiaries, entered into two separate Promissory Notes and Line of Credit Agreements (the "Agreements") with Aeneas Group Limited ("Aeneas Group") and Jurchen Investment Corporation ("Jurchen"). The Aeneas Group Agreement and Jurchen Agreement provide ATL with a line of credit up to twelve million dollars (\$12,000,000) and three million dollars (\$3,000,000), respectively (collectively, the "Line of Credit"), representing the maximum aggregate amount of the advances of funds from the Line of Credit that may be outstanding at any time under the Line of Credit (the "Principal Indebtedness"). ATL may draw down from the Line of Credit at any time through the day immediately preceding the third anniversary of the Effective Date (the "Maturity Date"). Interest will be payable on the outstanding Principal Indebtedness at the rate of eight percent (8%) per annum, payable semi-annually in arrears on February 12 and August 12 in each year. ATL may pre-pay in whole or in part, the Principal Indebtedness of the Line of Credit, and all interest accrued at any time prior to the Maturity Date, without penalty. Under the Agreements, in addition to certain standard covenants, we are also not permitted, without the prior written consent of Aeneas Group and Jurchen to (i) liquidate, dissolve or wind-up our business and affairs; (ii) effect any merger or consolidation transaction; (iii) sell, lease, transfer, license or otherwise dispose, in a single transaction or series of related transactions, all or substantially all of our assets; or (iv) consent to any of the foregoing. The Agreements are subject to standard events of default, which if not cured within the agreed upon cure period, permits Aeneas Group or Jurchen, as applicable, to declare the outstanding Principal Indebtedness immediately due and payable, to exercise any other remedy provided for in the Agreements or any other right available to Aeneas Group or Jurchen as provided at law or in equity. Jurchen and Aeneas Group also maintain the right to set-off during the term of the Agreements.

Registered Direct Offering

On February 28, 2020, we closed a Registered Direct Offering with certain non-affiliated institutional investors (the “Non-affiliated Purchasers”) and Jurchen Investment Corporation, our largest shareholder and wholly owned by Mr. Ian Huen, our Chief Executive Officer (the “Affiliated Purchaser” collectively with the Non-affiliated Purchasers, the “Purchasers”). The Purchasers purchased an aggregate of 1,351,350 Class A Ordinary Shares and warrants (“Warrants”) to purchase 1,351,350 Class A Ordinary Shares (the “Offering”), for gross proceeds of approximately \$10 million. The Warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. The purchase price for each Share and the corresponding Warrant is \$7.40.

We agreed that we would not issue any Class A Ordinary Shares (or Class A Ordinary Share Equivalents (as defined in the purchase agreement entered on February 25, 2020)) for 45 days following the closing of the Registered Direct Offering subject to certain customary exceptions, including, without limitation, issuances of restricted securities to consultants or employees of the Company, share option grants and issuances pursuant to existing outstanding securities and issuance in connection with strategic acquisition.

We agreed from the date of the purchase agreement until the date that is the later of (i) the 12 month anniversary of the closing date or (ii) one or more subsequent issuance by the Company or any of its subsidiaries of ordinary share equivalent having aggregate gross proceeds of at least \$20,000,000, the Purchasers shall have the right to participate in the subsequent financing up to an amount equal to 50% of the Subsequent Financing (the “Participation Maximum”) on the same terms, conditions and price provided for in the Subsequent Financing.

We also agreed certain most favored nation treatment of the all the Purchasers pursuant to which each Purchaser will have the opportunity to automatically have the same benefit if the terms and conditions with respect to this Purchase Agreement or any securities offered therein the Company offered to the other Purchasers are more favorable.

Item 8. Exhibits and Financial Statement Schedules.**(a) Exhibits**

The exhibits of the registration statement are listed in the Exhibit Index to this registration statement and are incorporated herein by reference.

(b) Financial Statement Schedules

Schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or consolidated financial statements or the notes thereto.

Item 9. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes:

- (1) That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (2) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (a) To include any prospectus required by section 10(a)(3) of the Securities Act;
 - (b) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) (§230.424(b) of this chapter) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (c) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) To file a post-effective amendment to the registration statement to include any financial statements required by "8.A. of Form 20-F (17 CFR 249.220f)" at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Securities Act need not be furnished, provided that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements.
- (5) That for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (6) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on September 11, 2020.

Aptorum Group Limited

By: /s/ Ian Huen
Name: Ian Huen
Title: Chief Executive Officer and Executive Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities set forth below on September 11, 2020.

/s/ Ian Huen
Name: Ian Huen
Chief Executive Officer (principal executive officer) and Executive Director

/s/ Sabrina Khan
Name: Sabrina Khan
Chief Financial Officer
(principal financial officer and principal accounting officer)

/s/ Darren Lui
Name: Darren Lui
President and Executive Director

/s/ Clark Cheng
Name: Clark Cheng
Chief Medical Officer and Executive Director

/s/ Douglas Arner
Name: Douglas Arner
Director

/s/ Charles Bathurst
Name: Charles Bathurst
Director

/s/ Mirko Scherer
Name: Mirko Scherer
Director

/s/ Justin Wu
Name: Justin Wu
Director

SIGNATURE OF AUTHORIZED REPRESENTATIVE IN THE UNITED STATES

Pursuant to the requirements of the Securities Act of 1933, the Registrant's duly authorized representative has signed this registration statement on Form F-1 in the City of New York, State of New York, on September 11, 2020.

By: /s/ Louis Taubman
Name: Louis Taubman
Title: Authorized Representative in the United States

EXHIBIT INDEX

(a) *Exhibits.* The following exhibits are included herein or incorporated herein by reference:

The following documents are filed as part of this registration statement:

Exhibit No.	Description
1.1	Form of Placement Agent Agreement**
3.1	Second Amended and Restated Articles of Association *
4.1	Registrant's Specimen Certificate for Ordinary Shares**
4.2	Form of Placement Agent's Warrant**
4.3	Form of Warrant*
4.4	Form of Pre-Funded Warrant**
5.1	Opinion of Cayman Islands counsel of Aptorum Group Limited, as to the validity of the Ordinary Shares and tax matters**
10.1	Appointment Letter between the Company and Ian Huen (Founder, Chief Executive Officer & Executive Director), dated September 25, 2017 *
10.2	Employment Letter between the Company and Sabrina Khan (Chief Financial Officer), dated September 1, 2017 *
10.3	Addendum to Employment Letter between Company and Sabrina Khan (Chief Financial Officer) dated April 24, 2018 *
10.4	Appointment Letter between the Company and Darren Lui (Chief Business Officer, President & Director), dated September 25, 2017 *
10.5	Employment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated August 31, 2017 *
10.6	Addendum to Appointment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated September 25, 2017 *
10.7	Second Addendum to Appointment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated October 30, 2017 *
10.8	Third Addendum to Appointment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated January 2, 2018 *
10.10	Appointment Letter between the Company and Charles Bathurst (Independent Non-Executive Director), dated September 24, 2017 *
10.11	Appointment Letter between the Company and Mirko Scherer (Independent Non-Executive Director), dated September 24, 2017 *
10.12	Employment Agreement between the Company and Justin Wu (Independent Non-Executive Director), dated September 18, 2017 *
10.13	Employment Agreement between the Company and Douglas Arner (Independent Non-Executive Director), dated February 13, 2018 *
10.25	2017 Share Option Plan*
10.26	Master Service Agreement between Covar Pharmaceuticals Incorporated and Aptorum Therapeutics Limited dated May 15, 2019⁽⁹⁾
10.27	Consulting Agreement between the Company and GloboAsia, LLC (includes provisions for the appointment of Keith Chan as member of the Scientific Advisory Board) dated March 13, 2019⁽⁵⁾
10.28	Exclusive Patent License Agreement for ALS-4 dated October 18, 2017⁽³⁾
10.29	First Amendment to Exclusive License Agreement for ALS-4 dated June 7, 2018 *
10.30	Second Amendment to Exclusive License Agreement for ALS-4 dated July 10, 2019^(6/7)
10.31	Exclusive License Agreement for ALS-4 dated January 11, 2019⁽⁴⁾
10.32	Appoint letter with Dr. Lee dated March 13, 2019++
10.33	Appointment letter with Dr. Ng, dated March 13, 2019++
10.34	Master Collaboration Agreement by and between the Company, A*ccelerate Technologies Pte. Ltd. and Aeneas Capital Limited dated April 24, 2019⁽¹⁾

- 10.35 [Form of Line of Credit Agreement^{\(2\)}](#)
- 10.36 [Form of Promissory Note^{\(2\)}](#)
- 10.37 [Consulting agreement with CGY Investment Limited effective on January 10, 2020^{\(6\)}](#)
- 10.38 [Distribution and Marketing Agreement between Nativus Life Sciences Limited and Multipak Limited^{\(6\)}](#)
- 10.39 [Secondment Agreement \(2\) between the Company and Aenco Limited dated April 1, 2020^{\(6\)}](#)
- 10.40 [Contract Research Agreement between Aptorum Therapeutics Limited and Aencas Technology \(Hong Kong\) Limited](#)
- 10.41 [Form of Securities Purchase Agreement*](#)
- 10.42 [Form of Purchaser Warrant Exchange Agreement^{\(8\)}](#)
- 10.43 [Form of Lock-Up Agreement^{\(8\)}](#)
- 21.1 [List of Subsidiaries](#)
- 23.1 [Consent of Marcum Bernstein & Pinchuk LLP](#)
- 23.2 Consent of Cayman Islands counsel of Aptorum Group Limited (included in Exhibit 5.1)**
- 23.3 Consent of U.S. counsel of Aptorum Group Limited**
- 99.1 [Code of Business Ethics*](#)
- ** To be filed by amendment.
- * Incorporated by reference to our Registration Statement Filed on Form F-1 on September 5, 2018
- +++ Incorporated by reference to our Registration Statement Filed on Form F-1 on November 15, 2018
- ++ Incorporated by reference to our Current Report on Form 6-K filed on April 1, 2019
- + Incorporated by reference to our Current Report on Form 6-K filed on February 26, 2020
- (1) Incorporated by reference to our Current Report on Form 6-K filed on April 24, 2019
- (2) Incorporated by reference to our Current Report on Form 6-K filed on August 14, 2019
- (3) Incorporated by reference to our Registration Statement Filed on Form F-1 on September 5, 2018; portions of the exhibit were previously omitted in reliance on the confidential treatment provisions available pursuant to revised paragraph 4(a) of Instructions as to Exhibits of Form 20-F
- (4) Incorporated by reference to our annual report on Form 20-F filed on April 15, 2019; portions of the exhibit were previously omitted in reliance on the confidential treatment provisions available pursuant to revised paragraph 4(a) of Instructions as to Exhibits of Form 20-F
- (5) Incorporated by reference to our annual report on Form 20-F filed on April 15, 2019
- (6) Incorporated by reference to our annual report on Form 20-F filed on April 29, 2020
- (7) Certain information from this exhibit has been excluded from this exhibit because it both (i) is not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed
- (8) Incorporated by reference to our Current Report on Form 6-K filed on August 27, 2020
- (9) Incorporated by reference to our Registration Statement Filed on Form F-1 on July 2, 2019

33

CONTRACT RESEARCH AGREEMENT

This Contract Research Agreement (the “**Agreement**”) is made and entered into on April _____, 2020 (“**Effective Date**”) by and between:

- (1) **APTORUM THERAPEUTICS LIMITED**, an exempted company incorporated in Cayman Islands, whose business address is 17th Floor, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong; and APTUS MANAGEMENT, a company incorporated in Hong Kong, whose business address is 17th Floor, Guangdong (collectively, “**Company**”); and
- (2) **AENEAS TECHNOLOGY (HONG KONG) LIMITED**, a company incorporated and registered in Hong Kong whose business address is at [], Hong Kong (“**Aeneas**”).

Company and Aeneas are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

Recitals:

WHEREAS, Aeneas is a technology company that is in the business of developing and providing technology and software solutions.

WHEREAS, Company has developed a Smart-ACT™ drug repurposing platform.

WHEREAS, Company and Aeneas desire to enter into this Agreement to provide the terms and conditions upon which Company engages Aeneas to assist the Company in computerized drug screening process of Smart-ACT™ platform.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, covenants, agreements, representations, warranties and indemnities and conditions contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged by the Parties, the Parties agree as follows:

1. Definitions

1.1 “**Affiliate**” means (i) all business units and divisions of a party or its parent company/corporation and (ii) any entity controlled by, controlling, or under common control with such party. Such entity shall be deemed to be an “Affiliate” only so long as such control exists. Upon request, the Parties agree to confirm the Affiliate status of a particular entity.

1.2 “**Applicable Laws**” means all applicable laws, treaties, statutes, codes, rules, regulations, regulatory policies, practices, guidelines, ordinances, judgments, orders, rulings or decisions of any governmental authorities and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, domestic or foreign, in each case binding on or applicable to a Party referred to in the context in Hong Kong .

1.3 “**Application Library**” means a collection of software components which is sourced from, and maintained by, a third party or an open source program.

1.4 “**Business**” means all business and affiliates carried out by the Company and its Affiliates from time to time.

1.5 “**Confidential Information**” means all information, know-how and records (in whatever form held) in any way connected with the Company, its Business and the Research, whether proprietary or otherwise, including (without prejudice to the generality of the foregoing) without limitation all formulae, designs, specifications, drawings, data, operations and testing procedures, manuals and instructions and all customer and supplier information and lists, sales information, business plans and methods, processes, systems, research and development, forecasts and all technical or other expertise, and all computer software, and all accounting and tax records, correspondence, orders and enquiries that are confidential or not generally known.

Confidential Information shall include information in written, oral, electronic or any other form whether or not it is clearly identified in writing at the time of disclosure as confidential. For avoidance of doubt, Confidential Information shall not include information that (i) is or becomes a part of the public domain through no act or omission of the other Party; (ii) was in the other Party’s lawful possession prior to the disclosure and had not been obtained by the other Party either directly or indirectly from the disclosing Party; (iii) is lawfully disclosed to the other Party by a third party without restriction on disclosure; or (iv) is independently developed by the other Party without use of or reference to the other Party’s Confidential Information.

1.6 “**Intellectual Property**” means patents, rights to apply for patents, trademarks, trade names, service marks, domain names, copyrights and all applications and registration of such worldwide, schematics, industrial models, inventions, know-how, trade secrets, computer software programs, and other intangible proprietary information.

1.7 “**Research**” means all services, materials, products or Intellectual Property provided by Aeneas to the Company and its Affiliates under this Agreement and conducted in accordance to Schedule 1.7, to be performed by computerized drug screening, or as otherwise agreed by the Parties from time to time.

1.8 “**Results**” means all data and information generated or derived from the Research and from other research performed by Aeneas under this Agreement.

2. Scope of the Agreement

2.1 Aeneas shall perform the Research, in accordance with the terms and conditions of this Agreement. Aeneas shall use reasonable efforts to perform the Research and to meet all standards, obligations and completion dates described in this Agreement or to be agreed by the Parties.

2.2 The Company may refine, update or insert tasks to the Research from time-to-time. Such change shall be effective upon notice to Aeneas. Notwithstanding the above, in no event shall the Company be allowed to move forward any completion dates set out in this Agreement or otherwise agreed by the Parties without Aeneas’s written consent.

2.3 Aeneas shall provide the Research in accordance with the terms and conditions set forth in this Agreement and all Applicable Laws.

2.4 Upon request by the Company, which shall be made from time to time, Aeneas shall transfer all: (i) Results, and/or (ii) any other materials, data,, information and all other data it possesses with regard to each Research to the Company, in such form as requested by the Company or as is then currently in the possession of Aeneas.

3. Appointment of Development Team

3.1 Aeneas shall assign appropriately qualified personnel to perform any and all of the Research, such personnel shall use high professional standards while performing the Research and maintaining full compliance with any and all specification and instructions set by the Company from time to time, as confirmed by Aeneas.

3.2 Aeneas shall protect, promote and act in the best interests of the Company, including but not limited to:

(i) devote the whole of their attention and skill to the interests and affairs of the Company in the discharge of the Research;

(ii) in the discharge of the Research and in the exercise of such powers, comply with all and any lawful directions and instructions from time to time made or given to them by the Company according to the best of their skills and ability, and comply with all resolutions and regulations from time to time passed or made by the Company;

(iii) faithfully and diligently perform the Research with due care and skill, and exercise only such powers as are consistent with the Research in relation to, and use commercially reasonable efforts to promote, the interests of the Company;

(iv) keep the Company promptly and fully informed of its conduct of the Research and give promptly to the Company (in writing if so requested) all such information as the Company may reasonably require in relation to its conduct of the Research insofar as such information is or ought to be within the knowledge of Aeneas and provide such written explanations to the Company may require in connection therewith; and

(v) use commercially reasonable efforts to ensure that they are available at all times on reasonable notice to provide the Research as the Company may require.

3.3 Aeneas shall have the sole responsibilities for the conduct of its employees, and for the payment of their entire compensation, including salary, withholding of income and social security taxes, worker's compensation, employee and disability benefits, employee insurance, unemployment insurance and any other employee benefits and requirements under the laws of Hong Kong SAR.

3.4 Aeneas may not subcontract or delegate the performance of all or part of the Research to any personnel other than its own personnel, unless with prior notice to Company.

4. Research Fees and Payment

4.1 In consideration of due performance of Aeneas's obligations under this Agreement, Aeneas shall be entitled to receive with effect from the Effective Date during the Term a Research Fee of HK\$963,760 per month (including any tax and duties payable by Aeneas pursuant to the Applicable Laws and any compensation rights that Aeneas may have as a result of their compliance with Clause 9 hereunder) ("**Research Fee**").

4.2 Aeneas shall issue an invoice to the Company on monthly basis. The Research Fee shall be due within thirty (30) days from the date of the invoice.

4.3 Notwithstanding anything to the contrary in this Agreement, Aeneas shall be responsible for retaining and discharging, and paying the reasonable fees, charges and expenses related to the performance of the Research. The Research Fees shall not be increased without prior written approval by the Company in its sole discretion.

4.4 The Research Fee shall not include reasonable travel expenses related to/for/from Aeneas's performance of the Research if so requested by the Company. Upon pre-approval of any such travel expenses by the Company, Aeneas shall be entitled to claim for reimbursement of all reasonable pre-approved out-of-pocket business expenses (including entertainment, travelling to and from any parts of the world, telephone and hotel expenses) properly and reasonably incurred by it in relation to the Research.

4.5 Payment of such Research Fees to Aeneas shall be made by the Company. The Company shall be entitled to deduct from the Research fees (and any other sums) due to Aeneas any sums that Aeneas may owe to the Company at any time. Payment in full or in part of the Research Fees shall be without prejudice to any claims or rights of the Company against Aeneas in respect of the provision of the Research.

4.6 All Research Fees are inclusive taxes, charges or remittance fees. Each Party shall pay any and all tax due under Applicable Laws by such Party in respect of all payments it receives or makes under this Agreement. Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the efforts of the Parties under this Agreement. Specifically, Aeneas shall be solely responsible for the payment of value added tax, import taxes, customs duties, registration duties, transfer taxes, stamp duties and any other taxes or duties imposed as a result of the Research under this Agreement.

4.7 All payments due under this Agreement to Aeneas shall be made via cheque or bank wire transfer which is notified by Aeneas in advance in immediately available funds to the following bank account, free and clear of any withholding tax, administrative fees, bank charges, transfer fees or other similar charges under the Applicable Laws.

5. Intellectual Property Rights; Copyrights

- 5.1 The Intellectual Property rights in the Results shall, at the Effective Date or (if later) on creation of the rights, vest in the Company. Aeneas hereby assigns (by way of present and, where appropriate, future assignment) all such Intellectual Property rights with full guarantee to the Company.
- 5.2 The Parties agree that the Intellectual Property rights of the Company and Aeneas existing as of the Effective Date are their separate intellectual property respectively, and are not affected by this Agreement. Notwithstanding the above, any improvement to Aeneas's Intellectual Property rights hereunder which are used, improved, modified or developed by Aeneas or the Company under or during the Term shall be the sole and exclusive Intellectual Property of the Company.
- 5.3 Notwithstanding to the contrary under the Applicable Laws, all Intellectual Property rights, title, and interest to the Results shall belong to and remain as the exclusive property the Company, and to the extent necessary to prove and enforce Company's ownership thereof, in consideration for the Research Fees, Aeneas hereby assigns to the Company all rights, title and interest in and to all such Results as soon as they are generated by Aeneas.
- 5.4 Aeneas represents and warrants that each current and former employee (including those employees involved in developing the Results), agent, developer and contractor who has had or has access to, contributed to, or participated in the creation of any Results has:
- (i) executed a confidentiality and nondisclosure agreement in favour of Company or Aeneas that protects the confidentiality of the Results; and
 - (ii) either (a) is a party to an agreement under which Company or Aeneas is deemed to be the original owner / author of all right, title and interest in the Results created by such person; or (b) has executed an assignment or an agreement to assign in favour of the Company or Aeneas of all such person's right, title and interest in the Results.
- 5.5 As the owner of Intellectual Property rights in the Results, the Company shall use and exploit all Results without restriction or additional compensation. The Company shall have sole ownership of all such Results and shall have the sole right to obtain and to hold in its own name patents (if applicable), copyrights, or such other protection as Company may deem appropriate to the subject matter, and any extensions, updates or improvements thereof.
- 5.6 Upon request of the Company, Aeneas shall give the Company or any person designated by the Company all assistance reasonably required to certify the ownership of and/or to perfect the Intellectual Property rights hereinabove defined, including the procurement of written assignment and title commitments in a form acceptable to the Company from all employees of Aeneas assigned hereunder (including those employees involved in developing the Results).
- 5.7 Notwithstanding Clause 0, Aeneas hereby expressly transfers and assigns to Company the copyright related to the Results. Such assignment and transfer of rights is performed on an exclusive basis and is valid worldwide for the duration of protection of corresponding copyright in accordance with Applicable Laws.

6. Representations and Warranties

6.1 Each Party represents, warrants and covenants to the other Party that:

- (i) it is a corporation duly incorporated, validly existing and in good standing;
- (ii) it has taken all actions on its party to authorize the execution, delivery and performance of the obligations undertaken in this Agreement, and no other corporate actions are necessary with respect thereto; and
- (iii) when executed and delivered by it, this Agreement will constitute a legal, valid and binding obligation of it, enforceable against it in accordance with this Agreement's terms.

6.2 The Aeneas further represents and warrants to the Company that as of the Effective Date and at all times during the term of the Agreement:

- (i) the Agreement has been duly executed and delivered by, and is the legal and valid obligations upon Aeneas and the entry into, the execution and delivery of, and the carrying out and other performance of its obligations under this Agreement by Aeneas: (a) does not conflict with, or contravene or constitute any default under, any agreement, instrument or understanding, oral or written, to which it is a party, and (b) does not violate Applicable Laws;
- (ii) Aeneas shall not enter into any other agreements which would interfere or prevent performance of the obligations described herein;
- (iii) Aeneas maintains and shall maintain during the term of this Agreement equipment and personnel sufficient to enable Aeneas to perform the Research in accordance with the Agreement;
- (iv) the Results are original, and are not subject to any third party Intellectual Property rights; the Results have not been published previously, in whole or part; and Aeneas has full power to grant the rights provided for in Clause 5;
- (v) no third party shall acquire, own, or possess any right or interest in any invention (whether patentable or not), copyright, trade secret, or other proprietary right that arises out of or is made as a consequence of any Research by Aeneas pursuant to this Agreement; and

7. Term; Termination

7.1 Unless otherwise earlier terminated pursuant to this Clause 7.2-7.4, this Agreement shall be effective on the Effective Date and shall remain in effect for eighteen (18) months after the Effective Date ("Term"). In the event that both Parties agree to extend the Term or to renew this Agreement, the Parties may do so by executing a separate written agreement or extension or renewal.

7.2 The Company may terminate this Agreement for any reason in the Company's sole discretion and without any indemnity or damages being due to Aeneas with thirty (30) days prior written notice.

7.3 In addition, the Company may terminate this Agreement:

- (i) upon breach by Aeneas of its obligations under this Agreement which is not cured within thirty (30) days of the notification of such by Aeneas;
- (ii) immediately upon written notice to Aeneas in the event Aeneas shall have become insolvent or bankrupt; or
- (iii) immediately if Aeneas or the relevant employees of Aeneas is/are no longer able to perform the Research or has not been able to provide the Research for an aggregate period of thirty (30) days; commits any act of gross or wilful misconduct or any serious, wilful, grossly negligent or material breach of any of the provisions contained in this Agreement; commits any fraud or act of dishonesty, engages in any conduct which, in the reasonable opinion of the Company, has caused or is likely to cause detriment to the interests of the Company, is otherwise prohibited by Applicable Laws from providing the Research (including any circumstances in which it may be unlawful for Aeneas to engage the relevant employees of Aeneas), refuses to carry out any reasonable lawful order given to Aeneas or the relevant employees of Aeneas by the Company in the Term, is incompetent or fail to diligently attend to the Research.

7.4 The Aeneas may terminate this Agreement in the event that the Company fails to meet its payment obligations under Clause 4.2 of this Agreement which is not cured within thirty (30) days of the notification of such by the Company; or

7.5 Upon expiration or termination of this Agreement, Aeneas shall:

- (i) immediately deliver to the Company all Confidential Information and all other tangible items including, without limitation, computers, computer discs, USB devices, books, records, documents, papers, materials, credit cards, correspondence, accounts, source code and other Intellectual Property, and other property of or relating to the Company which may then be in the Contactor's possession or under its power or control and all copies thereof or extracts therefrom; and
- (ii) immediately delete all Confidential Information from any computer discs, USB devices, tapes or other re-useable material in Aeneas's possession or control and destroy all other documents and tangible items in Aeneas's possession or under Aeneas's control which contain or refer to any Confidential Information.

7.6 Termination of this Agreement shall not limit either Party from pursuing other remedies available to it, including injunctive relief. For the avoidance of doubt, if the Agreement hereunder is terminated by Company for cause, Company shall not be obligated to continue making any additional Research Fees as of the date of termination, and has right to recover any paid Research Fees and expenses from Aeneas.

7.7 In the event of expiration or termination of this Agreement, Clauses 1, 5, 0, 7.5-7.7, 8, 9.2, 10.1, 10.2, 10.3, 11 and 12, as well as any provisions which are to survive by nature, shall survive such expiration or termination.

8. Confidentiality; Publication

8.1 The Aeneas shall not directly or indirectly publish, disseminate or otherwise disclose, deliver or make available to any third party any Confidential Information. The Aeneas shall use the Confidential Information solely for the purpose(s) set forth in this Agreement or for such other purposes as may be agreed upon by the Parties in writing. The confidentiality obligations under this Clause 8 shall survive this Agreement for five (5) years thereafter.

8.2 The Aeneas undertakes to use the Confidential Information only for the fulfilment of the Research, and shall not at any time:

- (i) divulge or communicate to any person any Confidential Information except those of the employees of the Company; and
- (ii) through any failure to exercise all due care and diligence cause any unauthorised disclosure of any Confidential Information (including without limitation): relating to the dealings, organisation, business, finance, transactions or any other affairs of the Company.

8.3 The Aeneas agrees, on behalf of itself, its employees, agents, subcontractors and Affiliates, not to publish or present any and all information, data and/or documents, whether patentable or not, as generated in the course of and/or as a result of the Research.

8.4 The Aeneas shall not disclose the existence of this Agreement, any terms herein and/or any relationship between Aeneas and the Company to any third party.

8.5 Neither Party shall use the other Party's name in connection with any oral disclosure, publication or promotion whatsoever.

9. Restraint on Activities of Aeneas and the relevant employees

9.1 During the Term, Aeneas undertakes and shall cause its relevant employees to undertake to the Company that they will devote their time and attention to the Company and will use her best endeavours to develop the business and interests of the Company and will not be concerned with any other business other than the Business.

9.2 For two (2) years after the expiration or termination of this Agreement, whichever is earlier, Aeneas shall not and shall cause the Development Team not to be directly or indirectly concerned with or engaged or interested in any other business which is in any respect in competition with or similar to the Business.

10. Indemnification; Insurance

10.1 The Aeneas shall indemnify and hold the Company, its Affiliates, employees and agents harmless against all losses, claims, penalties, costs, expenses and damages they may suffer as a result of any action brought by a third party to the extent and arising out of any:

- (i) breach of the Agreement by Aeneas; or
- (ii) any negligent act or omission of Aeneas.

10.2 This Agreement constitutes a contract for services and accordingly Aeneas shall be fully responsible for and shall indemnify the Company for and in respect of:

- (i) any income tax, social security contributions and any other liability, deduction, contribution, assessment or claim arising from or made in connection with the performance of the Research; Aeneas shall further indemnify the Company against all reasonable costs, expenses and any penalty, fine or interest incurred or payable by the Company in connection with or in consequence of any such liability, deduction, contribution, assessment or claim;
- (ii) any liability arising from any employment-related claim or any claim based on worker status (including reasonable costs and expenses) brought by Aeneas and the relevant employees against the Company arising out of or in connection with the provision of the Research; and
- (iii) any liability arising from Aeneas's gross or wilful misconduct, negligence, material breach of any provisions contained in this Agreement, or conduct outside the agreed scope of the Research or for which Aeneas was not authorised to act by the Company.

10.3 The Company may at its option satisfy any indemnity (in whole or in part) under Clauses 10.1 and 10.2 by way of deduction from any Research Fees due to Aeneas.

11. Governing Law and Jurisdiction

11.1 This Agreement is governed by and shall be construed in all respects in accordance with the laws of Hong Kong SAR.

11.2 Any dispute, controversy, difference or claim arising out of or relating to this Agreement, including the existence, validity, interpretation, performance, breach or termination thereof or any dispute regarding non-contractual obligations arising out of or relating to it shall be referred to and finally resolved by arbitration administered by the Hong Kong International Arbitration Centre (HKIAC) under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted. The arbitration proceeding shall be conducted in Hong Kong. There shall be three (3) arbitrators, each Party shall appoint one (1) arbitrator and the third arbitrator shall be jointly appointed by the appointed arbitrators.

12. Miscellaneous

12.1 The relationship of Aeneas and its personnel (including the relevant employees of Aeneas involved in developing the Results) to Company in the performance this Agreement is that of an independent contractor, and not a partner or joint venture. This Agreement shall not confer upon Aeneas or its personnel any benefits available to employees of the Company.

- 12.2 This Agreement, and the rights and obligations hereunder, may not be assigned or transferred by either Party without prior written consent of the other Party, except that Company may assign this Agreement to an Affiliate or in connection with a merger, consolidation or sale of all or substantially all of its assets.
- 12.3 Unless otherwise provided in this Agreement, no changes, amendments or alternations to this Agreement shall be allowed unless in writing and are signed by duly authorized representatives of both Parties.
- 12.4 All schedules to this Agreement shall constitute an integral part of this Agreement. With regard to the subject matter herein, this Agreement constitutes the entire agreement of the Parties, and shall supersede all previous written or oral representations, agreements and understandings between the Company and Aeneas.
- 12.5 In the event that any one or more of the provisions contained in this Agreement, shall for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect. If any of the provisions of this Agreement are held to be excessively broad, it shall be reformed and construed by limiting and reducing it so as to be enforceable to the maximum extent permitted by the Applicable Laws.
- 12.6 Neither of the Parties shall be held liable for nonfulfillment or delayed performance of this Agreement or of part thereof due directly or indirectly to any cause outside the defaulting Party's control, provided that notice of its inability to perform and the causes thereof shall be given immediately by the affected Party to the other.
- 12.7 This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one original instrument.
- 12.8 Headings to clauses herein are for the convenience of the parties only, and are not intended to be or to affect the meaning or interpretation of this Agreement.
- 12.9 All notice, requests, demands, approvals or consents, or other communications hereunder shall be in writing and shall be deemed given if delivered: (i) by electronic mail stated below, (ii) by registered mail with acknowledgement of receipt, or (iii) personally to the appropriate party at the address below:

If to the Company:

Address: 17/F, Guangdong Investment Tower,
148 Connaught Road Central,
Hong Kong
Email: []
Attention: Dr Thomas Lee

If to Aeneas:

Address:
Email:
Attention: Mr. Kenrick Fok

[Signature page to follow]

IN WITNESS WHEREOF, the Parties have executed this Agreement in two (2) originals by their respective officers duly authorized as of the Effective Date.

APTORUM THERAPEUTICS LIMITED

Name: Ian Huen
Title: Director

AENEAS TECHNOLOGY (HONG KONG) LIMITED

Name: Kenrick Fok
Title: Director

Schedule 1.7
Research (General)

34

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

For the transition period from _____ to _____

Commission file number: []

APTORUM GROUP LIMITED

(Exact Name of Registrant as Specified in its Charter)

N/A

(Translation of Registrant's Name into English)

Cayman Islands

(Jurisdiction of Incorporation or Organization)

Ian Huen, Chief Executive Officer

Aptorum Group Limited

17/F Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong

Tel: +(852) 2117 6611

Fax: (852) 2850 7286

(Address of principal executive offices and Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Class A Ordinary shares, par value \$1.00	APM	NASDAQ Global Market

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Class A Ordinary Shares: 6,597,362
Class B Ordinary Shares: 22,437,754

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>	Non-accelerated filer	<input checked="" type="checkbox"/>
				Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards[†] provided pursuant to Section 13(a) of the Exchange Act. ☐

[†] The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP <input checked="" type="checkbox"/>	International Financial Reporting Standards as issued by the International Accounting Standards Board <input type="checkbox"/>	Other <input type="checkbox"/>
---	--	--------------------------------

* If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 " Item 18 "

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

TABLE OF CONTENTS

INTRODUCTION	ii
PART I	1
ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS	1
ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE	1
ITEM 3. KEY INFORMATION	1
ITEM 4. INFORMATION ON THE COMPANY	45
ITEM 4A. UNRESOLVED STAFF COMMENTS	82
ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS	82
ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES	95
ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS	109
ITEM 8. FINANCIAL INFORMATION	113
ITEM 9. THE OFFER AND LISTING	114
ITEM 10. ADDITIONAL INFORMATION	114
ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	119
ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES	119
PART II	120
ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES	120
ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS	120
ITEM 15. CONTROLS AND PROCEDURES	120
ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT	122
ITEM 16B. CODE OF ETHICS	122
ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES	122
ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES	122
ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS	122
ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT	122
ITEM 16G. CORPORATE GOVERNANCE	122
ITEM 16H. MINE SAFETY DISCLOSURE	122
PART III	123
ITEM 17. FINANCIAL STATEMENTS	123
ITEM 18. FINANCIAL STATEMENTS	123
ITEM 19. EXHIBITS	123

INTRODUCTION

Unless the context otherwise requires, in this annual report on Form 20-F references to:

- “505(b)(2) Application” refers to an application for which one or more of the investigations relied upon by the applicant for approval “were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted” (21 U.S.C. 355(b)(2)).
- “Acticle” refers to Acticle Life Sciences Limited, an 80% owned subsidiary of Aptorum Group.
- “Aeneas” refers to AENEAS CAPITAL LIMITED, a wholly-owned subsidiary of Aeneas Group Limited, which is an indirect wholly-owned subsidiary of Jurchen Investment Corporation through Aeneas Limited. Because Mr. Huen, our CEO, holds 100% equity interest in Jurchen Investment Corporation, we refer Aeneas as a fellow subsidiary of Aptorum Group.
- “AGL” refers to Aeneas Group Limited, a wholly-owned subsidiary of Aeneas Limited and we refer AGL as a fellow subsidiary of Aptorum Group.
- “AL” refers to Aeneas Limited, an entity 76.8% owned by Jurchen Investment Corporation and we refer AL as a fellow subsidiary of Aptorum Group.
- “AML” refers to Aptorum Medical Limited, a 93% owned subsidiary of Aptorum Group, as of the date of this report.
- “AML Clinic” refers to an outpatient medical clinic operated by AML under the name of Talem Medical.
- “APD” refers to Aptorum Pharmaceutical Development Limited, a wholly-owned subsidiary of Aptorum Group.
- “Aptorum Group,” “Company,” “we,” “Group” and “us” refer to Aptorum Group Limited, a Cayman Islands exempted company with limited liability whose principal place of business is in Hong Kong.
- “Aptorum Non-Therapeutics Group” refers to the Company’s non-therapeutics segment that encompasses: (i) the development of surgical robotics and medical devices, which is operated through Signate Life Sciences Limited, (ii) AML Clinic and (iii) the sales of dietary supplement through Nativus Life Sciences Limited.
- “Aptorum Therapeutics Group” refers to the Company’s therapeutics segment that is operated through its wholly-owned subsidiary, Aptorum Therapeutics Limited, a Cayman Islands exempted company with limited liability, whose principal place of business is in Hong Kong and its indirect subsidiary companies, whose principal places of business are in Hong Kong.
- “Bond” refers to the \$15,000,000 convertible bond the Company originally issued to Peace Range (as hereinafter defined) in the Bond Offering, but which has since been repurchased by one of the Company’s wholly owned subsidiaries, Aptorum Investment Holding Limited, pursuant to that certain Bond Repurchase Agreement dated April 24, 2019 between the Company, Peace Range and Aptorum Investment Holding Limited, and which has matured and been redeemed on October 25, 2019
- “Bond Offering” refers to the Company’s private offering of the Bond that closed on April 25, 2018.
- “Boustead” refers to Boustead Securities, LLC.
- “cGCP” refers to Current Good Clinical Practice as adopted by the applicable regulatory authority.
- “cGLP” refers to Current Good Laboratory Practice as adopted by the applicable regulatory authority.
- “cGMP” refers to Current Good Manufacturing Practice as adopted by the applicable regulatory authority.
- “China Renaissance” refers to China Renaissance Securities (HK) Limited.
- “Class A Ordinary Shares” refers to the Company’s Class A Ordinary Shares, par value \$1.00 per share.
- “CMC” refers to chemical, manufacturing and control.
- “Covar” refers to Covar Pharmaceuticals Incorporated, a contract research organization engaged by the Company.

- “CROs” refers to contract research organizations.
- “EMA” refers to the European Medicines Agency.
- “EMEA” refers to Europe, the Middle East and Africa.
- “EPO” refers to the European Patent Organization or the European Patent Office operated by it.
- “European Patent” refers to patents issuable by the EPO.
- “Exchange Act” refers to the U.S. Securities Exchange Act of 1934, as amended.
- “FDA” refers to U.S. Food and Drug Administration.
- “FDCA” refers to the U.S. Federal Food, Drug and Cosmetic Act.
- “Fiscal year” refers to the period from January 31 of each calendar year to December 31 of the following calendar year.
- “HKD” refers to Hong Kong Dollars.
- “Hong Kong” or “H.K.” refers to Hong Kong Special Administrative Region of the People’s Republic of China.
- “Hong Kong Doctors” refers to the doctors in Hong Kong under the employment of AML Clinic.
- “IND” refers to Investigational New Drugs.
- “IP” refers to intellectual property.
- “IPO” or “Offering” means the initial public offering by the Company of 761,419 Class A Ordinary Shares consummated on December 17, 2018.
- “Jurchen” refers to Jurchen Investment Corporation, a company wholly-owned by our CEO, Ian Huen, and a holding company of Aptorum Group.
- “Lead Projects” refers to two of the Company’s therapeutic projects ALS-4 and SACT-1.
- “Major Patent Jurisdictions” refers to the United States, member states of the European Patent Organization and the People’s Republic of China.
- “Nativus” refers to Nativus Life Sciences Limited, a wholly-owned subsidiary of Aptorum Group.
- “NMPA” refers to China’s National Medical Products Administration and its predecessor, the China Food and Drug Administration.
- “NDA” refers to a New Drug Application issued by the FDA.
- “PRC” and “China” refer to the People’s Republic of China.
- “Registered Direct Offering” means the registered direct offering by the Company of 1,351,350 Class A Ordinary Shares and warrants to purchase up to 1,351,350 Class A Ordinary Share consummated on February 28, 2020.
- “Restructure” refers to the Company’s change from an investment fund with management shares and non-voting participating redeemable preference shares to a holding company with operating subsidiaries, effective as of March 1, 2017.
- “Registration Statement” refers to the Company’s Registration Statement on Form F-1 (File No. 333-227198) for the sale of up to 3,493,969 Class A Ordinary Shares (including Class A Ordinary Shares underlying certain warrants and a bond, as fully described therein) which initially filed on September 5, 2018 and became effective on December 3, 2018.
- “R&D” refers to research and development.
- “R&D Center” refers to an in-house pharmaceutical development center operated by APD.

- “Securities Exchange Commission,” “SEC,” “Commission” or similar terms refer to the Securities Exchange Commission.
- “Sarbanes-Oxley Act” refers to the Sarbanes-Oxley Act of 2002.
- “Securities Act” refers to the Securities Act of 1933.
- “Series A Notes” refers to Series A convertible notes, at a purchase price of \$10,000 per note, sold in the Series A Note Offering.
- “Series A Note Investors” refers to the investors who purchased Series A Notes.
- “Series A Note Offering” refers to the private offering of Series A Notes, pursuant to Regulation S or Regulation D, as promulgated under the Securities Act that closed on May 15, 2018.
- “Shares” or “Ordinary Share” are our Ordinary Shares, par value \$1.00 per share.
- “Signate” refers to Signate Life Sciences Limited, a wholly-owned subsidiary of Aptorum Group.
- “UK” refers to the United Kingdom.
- “Underwriter Warrants” refers to warrants issued to the underwriters of the IPO, which have now been fully exercised on a cashless basis.
- “United States,” “U.S.” and “US” refer to the United States of America.
- “Videns” refers to Videns Incorporation Limited, a wholly-owned subsidiary of Aptorum Group.
- “US\$,” “U.S. dollars,” or “dollars” are to the legal currency of the United States.

Discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

This annual report on Form 20-F includes our audited consolidated balance sheets (successor basis) as of December 31, 2019 and 2018, the related consolidated statements (successor basis) of operations and comprehensive loss, equity and cash flows for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, the statements (predecessor basis) of operations, changes in net assets, and cash flows for the period January 1, 2017 through February 28, 2017, and the related notes to consolidated financial statements.

Our operations and equity are funded in U.S. dollars and we currently incur the majority of our expenses in U.S. dollars or in H.K. dollars. H.K. dollar is currently pegged to the U.S. dollar; however, we cannot guarantee that such peg will continue to be in place in the future. Our exposure to foreign exchange risk primarily relates to the limited cash denominated in currencies other than the functional currencies of each entity and limited revenue contracts dominated in H.K. dollars in certain PRC operating entities. We do not believe that we currently have any significant direct foreign exchange risk and have not hedged exposures denominated in foreign currencies or any other derivative financial instruments.

Part I

Item 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not Applicable.

Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable.

Item 3. KEY INFORMATION

A. Selected Financial Data

The following summary consolidated balance sheets (successor basis) as of December 31, 2019 and 2018, consolidated statements of operations and comprehensive loss (successor basis) for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, as well as the statement of operations (predecessor basis) for the period January 1, 2017 through February 28, 2017, have been derived from our audited consolidated financial statements included elsewhere in this annual report. The following summary consolidated balance sheet (successor basis) as of December 31, 2017 have been derived from our audited consolidated financial statements which are not included in this annual report.

You should not view our historical results as an indicator of our future performance.

The following table presents our summary consolidated statements of operations and comprehensive loss (successor basis) for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017.

Selected Consolidated Statements of Operations and Comprehensive Loss (Successor Basis)
(In U.S. Dollars, except number of shares)

	Year Ended December 31, 2019	Year Ended December 31, 2018	March 1, 2017 through December 31, 2017
Revenue			
Healthcare service income	\$ 535,166	\$ 383,450	\$ -
Operating expenses			
Cost of healthcare service	(794,545)	(318,011)	-
Research and development expenses	(6,939,051)	(3,101,432)	(2,560,323)
General and administrative fees	(7,373,425)	(4,919,626)	(1,480,093)
Legal and professional fees	(3,405,705)	(1,811,770)	(1,395,490)
Other operating expenses	(220,891)	(560,709)	(257,177)
Total expenses	<u>(18,733,617)</u>	<u>(10,711,548)</u>	<u>(5,693,083)</u>
Other (loss) income			
(Loss) gain on investments in marketable securities, net	(81,839)	501,522	3,912,500
Gain on non-marketable investments	1,147,190	-	-
Gain (loss) on investments in derivatives, net	87,599	(974,444)	(827,501)
Gain on use of digital currencies	46,717	-	-
Gain on extinguishment of convertible debts	1,198,490	-	-
Changes in fair value of warrant liabilities	(866,300)	124,726	-
Interest (expense) income, net	(3,699,672)	(4,458,191)	44,269
Rental income	16,868	-	-
Dividend income	-	-	2,308
Sundry income	232,460	-	-
Total other (loss) income, net	<u>(1,918,487)</u>	<u>(4,806,387)</u>	<u>3,131,576</u>
Net loss	<u>(20,116,938)</u>	<u>(15,134,485)</u>	<u>(2,561,507)</u>
Less: net loss attributable to non-controlling interests	<u>(1,430,176)</u>	<u>(302,762)</u>	<u>(14,045)</u>
Net loss attributable to Aptorum Group Limited	<u>\$ (18,686,762)</u>	<u>\$ (14,831,723)</u>	<u>\$ (2,547,462)</u>
Net loss per share – basic and diluted*	\$ (0.64)	\$ (0.53)	\$ (0.09)
Weighted-average shares outstanding – basic and diluted	<u>29,008,445</u>	<u>27,909,788</u>	<u>26,963,435</u>
Net loss	\$ (20,116,938)	\$ (15,134,485)	\$ (2,561,507)
Other Comprehensive loss			
Unrealized loss on investments in available-for-sale securities	-	(1,122,251)	(367,782)
Exchange differences on translation of foreign operations	(10,897)	5,345	-
Other Comprehensive loss	<u>(10,897)</u>	<u>(1,116,906)</u>	<u>(367,782)</u>
Comprehensive loss	<u>(20,127,835)</u>	<u>(16,251,391)</u>	<u>(2,929,289)</u>
Less: comprehensive loss attributable to non-controlling interests	<u>(1,430,176)</u>	<u>(302,762)</u>	<u>(14,045)</u>
Comprehensive loss attributable to the shareholders of Aptorum Group Limited	<u>(18,697,659)</u>	<u>(15,948,629)</u>	<u>(2,915,244)</u>

* The shares and per share data are presented at a weighted average basis to reflect the nominal share issuance.

The following table presents our summary statements of operations (predecessor basis) for the period January 1, 2017 through February 28, 2017.

Selected Statement of Operations (Predecessor Basis)
(In U.S. Dollars)

	January 1, 2017 through February 28, 2017
Investment income:	
Interest income	\$ 3,011
Total investment income	<u>3,011</u>
Expenses	
General and administrative fees	17,516
Management fees	108,958
Legal and professional fees	98,646
Other operating expenses	<u>1,907</u>
Total expenses	<u>227,027</u>
Net investment loss	<u>\$ (224,016)</u>
Realized and unrealized losses	
Net realized losses on investments in unaffiliated issuers	\$ (15,327)
Net change in unrealized depreciation on investments	<u>(386,741)</u>
Net realized and unrealized losses	<u>(402,068)</u>
Net decrease in net assets resulting from operations	<u>\$ (626,084)</u>

The following table presents our summary consolidated balance sheets (successor basis) as of December 31, 2019, 2018 and 2017.

	As of December 31, 2019	As of December 31, 2018	As of December 31, 2017
Cash and restricted cash	\$ 5,293,173	\$ 26,107,238	\$ 16,725,807
Total current assets	8,032,881	28,722,941	20,283,399
Total assets	23,954,218	45,074,640	31,559,982
Total current liabilities	2,674,675	12,184,865	1,330,734
Total liabilities	9,102,466	12,328,738	1,330,734
Total equity attributable to the shareholders of Aptorum Group Limited	16,361,208	33,114,435	30,243,293
Non-controlling interests	(1,509,456)	(368,533)	(14,045)
Total equity	14,851,752	32,745,902	30,229,248
Total liabilities and equity	\$ 23,954,218	\$ 45,074,640	\$ 31,559,982

Exchange Rate Information

Our operations and equity are funded in U.S. dollars and we currently incur the majority of our expenses in U.S. dollars or in H.K. dollars. H.K. dollar is currently pegged to the U.S. dollar; however, we cannot guarantee that such peg will continue to be in place in the future.

If we are exposed to foreign currency exchange risk as our results of operations, cash flows maybe subject to fluctuations in foreign currency exchange rates. For example, if a significant portion of our clinical trial activities may be conducted outside of the United States, and associated costs may be incurred in the local currency of the country in which the trial is being conducted, which costs could be subject to fluctuations in currency exchange rates. We currently do not engage in hedging transactions to protect against uncertainty in future exchange rates between particular foreign currencies and the U.S. dollar. A decline in the value of the U.S. dollar against currencies in countries in which we conduct clinical trials could have a negative impact on our research and development costs. Foreign currency fluctuations are unpredictable and may adversely affect our financial condition, results of operations and cash flows.

The following table sets forth information concerning exchange rates between the H.K. dollar and the United States dollar for the periods indicated.

	Period Ended December 31, (1)	Average (2)
2016	7.7534	7.7618
2017	7.8128	7.7950
2018	7.8305	7.8376
2019	7.7894	7.8335
2020 (through April 24, 2020)	7.7506	7.7653
January, 2019	7.8463	7.8411
February, 2019	7.8496	7.8477
March, 2019	7.8498	7.8492
April, 2019	7.8451	7.8445
May, 2019	7.8387	7.8478
June, 2019	7.8103	7.8260
July, 2019	7.8275	7.8133
August, 2019	7.8403	7.8420
September, 2019	7.8401	7.8350
October, 2019	7.8376	7.8421
November, 2019	7.8267	7.8279
December, 2019	7.7894	7.8045
January, 2020	7.7665	7.7725
February, 2020	7.7927	7.7757
March, 2020	7.7513	7.7651
April, 2020	7.7506	7.7514

(1) The exchange rates reflect the noon buying rate in effect in New York City for cable transfers of H.K. dollar.

(2) Annual averages are calculated from month-end rates. Monthly averages are calculated using the average of the daily rates during the relevant period.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Risks Related to the Preclinical and Clinical Development of Our Drug Candidates

We currently do not generate revenue from product sales and may never become profitable; unless we can raise more capital through additional financings, of which there can be no guarantee, our principal source of revenue will be from AML Clinic, which may not be substantial.

Our ability to generate revenue and become profitable depends upon our ability to successfully complete the development of, and obtain the necessary regulatory approvals for, the drug candidates in our Lead Projects and any future drug candidates we may develop, as we do not currently have any drugs that are available for commercial sale. We expect to continue to incur losses before commercialization of our drug candidates and any future drug candidates. None of our drug candidates has been approved for marketing in the U.S., Europe, the PRC or any other jurisdictions and may never receive such approval. Our ability to generate revenue and achieve profitability is dependent on our ability to complete the development of our drug candidates and any future drug candidates we develop in our portfolio, obtain necessary regulatory approvals, and have our drugs products under development manufactured and successfully marketed, of which there can be no guarantee. Although AML Clinic commenced operations in June 2018 and we expect to receive some revenue from such operations, even at full capacity, AML Clinic may not bring enough revenue to support our operation and R&D. Thus, we may not be able to generate a profit until our drug candidates become profitable.

Even if we receive regulatory approval and marketing authorization for one or more of our drug candidates or one or more of any future drug candidates for commercial sale, a potential product may not generate revenue at all unless we are successful in:

- developing a sustainable and scalable manufacturing process for our drug candidates and any approved products, including establishing and maintaining commercially viable supply relationships with third parties;
- launching and commercializing drug candidates following regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor;
- obtaining market acceptance of our drug candidates as viable treatment options;

- addressing any competing technological and market developments;
- negotiating and maintaining favorable terms in any collaboration, licensing or other arrangement into which we may enter to commercialize drug candidates for which we have obtained required approvals and marketing authorizations; and
- maintaining, protecting and expanding our portfolio of IP rights, including patents, trade secrets and know-how.

In addition, our ability to achieve and maintain profitability depends on timing and the amount of expenses we will incur. Our expenses could increase materially if we are required by the FDA, NMPA, EMA or other comparable regulatory authorities to perform studies in addition to those that we currently have anticipated. Even if our drug candidates are approved for commercial sale, we anticipate incurring significant costs associated with the commercial launch of these products.

Our ability to become and remain profitable depends on our ability to generate revenue. Even if we are able to generate revenues from AML Clinic or the sale or sublicense of any products we may develop or license, we may not become profitable on a sustainable basis or at all. Our failure to become and remain profitable would decrease the value of our Company and adversely affect the market price of our Class A Ordinary Shares, which could impair our ability to raise capital, expand our business or continue our operations.

AML Clinic's operations may be our principal source of revenue for the foreseeable future and most likely, without additional financing, such revenue will not be sufficient for us to carry out all of our plans.

As stated above, we have not generated any revenue and do not foresee generating any revenue from our drug candidates in the near future. Effective as of March 2018, we leased the property in Central, Hong Kong that is the home to AML Clinic, which commenced operations in June 2018.

Until our therapeutic candidates produce revenue, our principal source of revenue shall be from AML Clinic, but we cannot guarantee that it will provide the expected revenue, and even if expected revenue is realized, it will not be sufficient by itself to fund our other operations. We believe that available cash, together with the efforts from management plans and actions described elsewhere in this report, should enable the Company to meet presently anticipated cash needs for at least the next 12 months after the date that the financial statements are issued and the Company has prepared the consolidated financial statements on a going concern basis. However, the Company continues to have ongoing obligations and it expects that it will require additional capital in order to execute its longer-term development plan. If the Company encounters unforeseen circumstances that place constraints on its capital resources, management will be required to take various measures to conserve liquidity, which could include, but not necessarily be limited to, deferring some of its research and seeking to dispose of marketable securities. Management cannot provide any assurance that the Company will raise additional capital if needed.

We depend substantially on the success of the drug candidates being researched as our current Lead Projects, which are in the preclinical stage of development. The preclinical development, IND-enabling, and clinical trials of our drug candidates may not be successful. If we are unable to license or sublicense, sell or otherwise commercialize our drug candidates, or experience significant delays in doing so, our business will be materially harmed.

Our business and the ability to generate revenue related to product sales, if ever achieved, will depend on the successful development, regulatory approval and licensing or sublicensing or other commercialization of our drug candidates or any other drug candidates we may develop. We have invested a significant amount of financial resources in the development of our drug candidates and we expect to invest in other drug candidates. The success of our drug candidates and any other potential drug candidates will depend on many factors, including but not limited to:

- successful enrollment in, and completion of, studies in animals and clinical trials;
- other parties' ability in conducting our clinical trials safely, efficiently and according to the agreed protocol;

- receipt of regulatory approvals from the FDA, NMPA, EMA and other comparable regulatory authorities for our drug candidates;
- our ability to establish commercial manufacturing capabilities by making arrangements with third-party manufacturers;
- reliance on other parties to conduct our clinical trials swiftly and effectively;
- launch of commercial sales of our drug candidates, if and when approved;
- obtaining and maintaining patents, trade secrets and other IP protection and regulatory exclusivity, as well as protecting our rights in our own IP;
- ensuring that we do not infringe, misappropriate or otherwise violate patents, trade secrets or other IP rights of other parties;
- obtaining acceptance of our drug candidates by doctors and patients;
- obtaining reimbursement from third-party payors for our drug candidates, if and when approved;
- our ability to compete with other drug candidates and drugs; and
- maintenance of an acceptable safety profile for our drug candidates following regulatory approval, if and when received.

We may not achieve regulatory approval and commercialization in a timely manner or at all. Significant delays in obtaining approval for and/or to successfully commercialize our drug candidates would materially harm our business and we may not be able to generate sufficient revenues and cash flows to continue our operations.

Preclinical development is a long, expensive and uncertain process, and we may terminate one or more of our current preclinical development programs.

Traditionally, drug discovery and development is a time-consuming, costly and high-risk business. On average, the cost of launching a new drug is estimated to approach US\$2.6 billion and can take around 12 years to make it to the market (4 key benefits of drug repositioning, (n.d.). Retrieved from <http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>). Despite the huge expenditures, only approximately 1 in 1,000 potential drugs is graduated to human clinical trials after pre-clinical testing in the United States, (Norman, G. A. Drugs, Devices, and the FDA: Part 1. JACC: Basic to Translational Science, 1(3), 170-179, 2016) and nearly 86.2% of drug candidates entering phase 1 trials fails to achieve drug approval. (Wong C. H., Siah K. W. & Lo A. W. (2019, April), "Estimation of clinical trial success rates and related parameters," retrieved from <https://academic.oup.com/biostatistics/article/20/2/273/4817524>). Even after a drug is commercialized, there are just too many factors affecting the sales of pharmaceutical products, including unmet need/burden of disease (68.2%), clinical efficacy (47.3%), comparator choice (36.4%), safety profile (36.4%), and price (35.5%) (Sendyona, S., Odeyemi, I., & Maman, K. "Perceptions and factors affecting pharmaceutical market access: Results from a literature review and survey of stakeholders in different settings" Journal of Market Access & Health Policy, 4(1), 31660, 2016). In the end, on average, only 20% of approved new drugs generate revenues that exceed the average R&D investment. (Rosenblatt, M. (2014, December 19) "The Real Cost of "High-Priced" Drugs," retrieved from <https://hbr.org/2014/11/the-real-cost-of-high-priced-drugs>). We may determine that certain preclinical product candidates or programs do not have sufficient potential to warrant the allocation of resources toward them. Accordingly, we may elect to terminate our programs for and, in certain cases, our licenses to, such product candidates or programs. If we terminate a preclinical program in which we have invested significant resources, we will have expended resources on a program that will not provide a full return on our investment and missed the opportunity to have allocated those resources to potentially more productive uses.

Management has discretion to terminate the development of any of our projects at any time.

In light of the costs, both in time and expense, as well as the preclinical results and general business considerations, management may decide not to continue developing a particular preclinical program without announcement. Management will always base its decision on what it believes to be the most efficient use of the Company's resources to provide the most value to its shareholders. As a result, investors may not always be aware of the termination of a previously announced study or trial. The Company will continue to provide update on its active preclinical projects in its SEC filings and/or press releases, as appropriate.

We may not be successful in our efforts to identify or discover additional drug candidates. Due to our limited resources and access to capital, we must continue to prioritize development of certain drug candidates; such decisions may prove to be wrong and may adversely affect our business.

Although we intend to explore other therapeutic opportunities in addition to the drug candidates that we are currently developing, we may fail to identify other drug candidates for a number of reasons. For example, our research methodology may be unsuccessful in identifying potential drug candidates or those we identify may be shown to have harmful side effects or other undesirable characteristics that make them unmarketable or unlikely to receive regulatory approval.

Research programs to pursue the development of our drug candidates for additional indications and to identify new drug candidates and disease targets require substantial technical, financial and human resources whether or not we ultimately are successful. Our research programs may initially show promise in identifying potential indications and/or drug candidates, yet fail to yield results for clinical development for a number of reasons, including but not limited to:

- the research methodology used may not be successful in identifying potential indications and/or drug candidates;
- potential drug candidates may, after further study, be shown to have harmful adverse effects or other characteristics that indicate they are unlikely to be effective drugs; or
- it may take greater human and financial resources to identify additional therapeutic opportunities for our drug candidates or to develop suitable potential drug candidates through internal research programs than we will possess, thereby limiting our ability to diversify and expand our drug portfolio.

Because we have limited financial and managerial resources, we have chosen to focus at present on our two Lead Projects, which may ultimately prove to be unsuccessful. As a result of this focus, we may forego or delay pursuit of opportunities with other drug candidates, or for other indications that later prove to have greater commercial potential or a greater likelihood of success. Even if we determine to pursue alternative therapeutic or diagnostic drug candidates, these other drug candidates or other potential programs may ultimately prove to be unsuccessful. In short, our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.

Accordingly, there can be no assurance that we will ever be able to develop suitable potential drug candidates through internal research programs. This could materially adversely affect our future growth and prospects.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

While we have not commenced any clinical trials and do not expect to start our first clinical trials until at least 2020 or 2021, assuming we obtain approval to do so from at least one regulatory authority, of which there can be no assurance, timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who meet the trial criteria and remain in the trial until its conclusion. We may experience difficulties enrolling and retaining appropriate patients in our clinical trials for a variety of reasons, including but not limited to:

- the size and nature of the patient population;
- patient eligibility criteria defined in the clinical protocol;

- the size of study population required for statistical analysis of the trial’s primary endpoints;
- the proximity of patients to trial sites;
- the design of the trial and changes to the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials for similar therapies or other new therapeutics exist and will reduce the number and types of patients available to us;
- clinicians’ and patients’ perceptions as to the potential advantages and side effects of the drug candidate being studied in relation to other available therapies, including any new drugs or treatments that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents;
- patients enrolled in clinical trials may not complete a clinical trial; and
- the availability of approved therapies that are similar to our drug candidates.

Even if we are able to enroll a sufficient number of patients in our clinical trials, delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our drug candidates.

Clinical drug development involves a lengthy and expensive process and could fail at any stage of the process. We have limited experience in conducting clinical trials and results of earlier studies and trials may not be reproduced in future clinical trials.

For our drug candidates, clinical testing is expensive and can take many years to complete, while failure can occur at any time during the clinical trial process. The results of studies in animals and early clinical trials of our drug candidates may not predict the results of later-stage clinical trials. Drug candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through studies in animals and initial clinical trials. In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same drug candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations (including genetic differences), patient adherence to the dosing regimen and the patient dropout rate. Results in later trials may also differ from earlier trials due to a larger number of clinical trial sites and additional countries and languages involved in such trials. In addition, the design of a clinical trial can determine whether its results will support approval of a drug candidate, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced and significant expense has been incurred.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of demonstrated efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Clinical trials of potential products often reveal that it is not practical or feasible to continue development efforts. Furthermore, if the trials we conduct fail to meet their primary statistical and clinical endpoints, they will not support the approval from the FDA, NMPA, EMA or other comparable regulatory authorities for our drug candidates. If this occurs, we would need to replace the failed study with new trials, which would require significant additional expense, cause substantial delays in commercialization and materially adversely affect our business, financial condition, cash flows and results of operations. (See “We are subject to risks related to the carrying out and outcome of clinical trials of medical devices”)

If clinical trials of our drug candidates fail to demonstrate safety and efficacy to the satisfaction of the FDA, NMPA, EMA or other comparable regulatory authorities, or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.

Before applying for and obtaining regulatory approval for the sale of any of our drug candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and may fail. A failure of one or more of our clinical trials can occur at any stage of testing and successful interim results of a clinical trial do not necessarily predict successful final results.

We and our CROs are required to comply with current Good Clinical Practices ("cGCP") requirements, which are regulations and guidelines enforced by the FDA, NMPA, EMA and other comparable regulatory authorities for all drugs in clinical development. Regulatory authorities enforce these cGCP through periodic inspections of trial sponsors, principal investigators and trial sites. Compliance with cGCP can be costly and if we or any of our CROs fail to comply with applicable cGCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, NMPA, EMA or comparable regulatory authorities may require us to perform additional clinical trials before approving our marketing applications.

We may experience numerous unexpected events during, or as a result of, clinical trials that could delay or prevent our ability to receive regulatory approval or commercialize our drug candidates, including but not limited to:

- regulators, institutional review boards ("IRBs") or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs;
- the number of patients required for clinical trials of our drug candidates may be larger than we anticipate, enrollment may be insufficient or slower than we anticipate or patients may drop out at a higher rate than we anticipate;
- our contractors and investigators may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical trials of our drug candidates for various reasons, including a lack of clinical response or a determination that participants are being exposed to unacceptable health risks;
- regulators, IRBs or ethics committees may require that we or our investigators suspend or terminate clinical research for various reasons, including non-compliance with regulatory requirements;
- the cost of clinical trials of our drug candidates may be greater than we anticipate;
- the supply or quality of our drug candidates or other materials necessary to conduct clinical trials of our drug candidates may be insufficient or inadequate; and
- our drug candidates may cause adverse events, have undesirable side effects or other unexpected characteristics, causing us, our investigators, or regulators to suspend or terminate the trials.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if they raise safety concerns, we may:

- be delayed in obtaining regulatory approval for our drug candidates;
- not obtain regulatory approval at all;

- obtain approval for indications that are not as broad as intended;
- have a drug removed from the market after obtaining regulatory approval;
- be subject to additional post-marketing testing requirements;
- be subject to restrictions on how a drug is distributed or used; or
- be unable to obtain reimbursement for use of a drug.

Delays in testing or approvals may result in increases in our drug development costs. We do not know whether any clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, or at all. Clinical trials may produce negative or inconclusive results. Moreover, these trials may be delayed or proceed less quickly than intended. Delays in completing our clinical trials will increase our costs, slow down our drug candidate development and approval process, and jeopardize our ability to commence product sales and generate revenues and we may not have sufficient funding to complete the testing and approval process. Any of these events may significantly harm our business, financial condition and prospects, lead to the denial of regulatory approval of our drug candidates or allow our competitors to bring drugs to market before we do, impairing our ability to commercialize our drugs if and when approved.

Significant clinical trial delays also could shorten any periods during which we have the exclusive right to commercialize our drug candidates or allow our competitors to bring products to market before we do, impair our ability to commercialize our drug candidates and may harm our business and results of operations.

We may in the future conduct clinical trials for our drug candidates in sites outside the U.S. and the FDA may not accept data from trials conducted in such locations.

We may in the future conduct certain of our clinical trials outside the U.S. Although the FDA may accept data from clinical trials conducted outside the U.S. for our New Drug Application (“NDA”), acceptance of this data is subject to certain conditions imposed by the FDA. There can be no assurance the FDA will accept data from any of the clinical trials we conduct outside the U.S. If the FDA does not accept the data from any of our clinical trials conducted outside the U.S., it would likely result in the need for additional clinical trials in the U.S., which would be costly and time-consuming and could delay or prevent the commercialization of any of our drug candidates.

Risks Related to Obtaining Regulatory Approval for Our Drug Candidates

The regulatory approval processes of the FDA, NMPA, EMA and other comparable regulatory authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our current drug candidates or any future drug candidates we may develop, our business will be substantially harmed.

We cannot commercialize drug candidates without first obtaining regulatory approval to market each drug from the FDA, NMPA, EMA or comparable regulatory authorities. Before obtaining regulatory approvals for the commercial sale of any drug candidate for a target indication, we must demonstrate in studies in animals and well-controlled clinical trials, and, with respect to approval in the United States and other regulatory agencies, to the satisfaction of the FDA, NMPA, EMA or comparable regulatory authorities, that the drug candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate.

The time required to obtain approval from the FDA, NMPA, EMA and other comparable regulatory authorities is unpredictable but typically takes many years following the commencement of studies in animals and clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities.

In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval can differ among regulatory authorities and may change during the course of the development of a drug candidate. We have not obtained regulatory approval for any drug candidate. It is possible that neither our existing drug candidates nor any drug candidates we may discover or acquire for development in the future will ever obtain regulatory approval. Even if we obtain regulatory approval in one jurisdiction, we may not obtain it in other jurisdictions.

Our drug candidates could fail to receive regulatory approval from any of the FDA, NMPA, EMA or other comparable regulatory authorities for many reasons, including but not limited to:

- disagreement with regulators regarding the design or implementation of our clinical trials;
- failure to demonstrate that a drug candidate is safe and effective or safe, pure and potent for its proposed indication;
- failure of clinical trial results to meet the level of statistical significance required for approval;
- failure to demonstrate that a drug candidate's clinical and other benefits outweigh its safety risks;
- disagreement with regulators regarding our interpretation of data from studies in animals or clinical trials;
- insufficiency of data collected from clinical trials of our drug candidates to support the submission and filing of a New Drug Application ("NDA"), or other submission or to obtain marketing approval;
- the FDA, NMPA, EMA or a comparable regulatory authority's finding of deficiencies related to the manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies; and
- changes in approval policies or regulations that render our preclinical studies and clinical data insufficient for approval.

Any of the FDA, NMPA, EMA or other comparable regulatory authorities may require more information, including additional preclinical studies or clinical data, to support approval, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program. If we were to obtain approval, regulatory authorities may approve any of our drug candidates for fewer or more limited indications than we request. Regulatory authorities also may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a drug candidate with a label that is not desirable for the successful commercialization of that drug candidate. In addition, if our drug candidate produces undesirable side effects or involves other safety issues, the FDA may require the establishment of a Risk Evaluation Mitigation Strategy ("REMS"), or NMPA, EMA or other comparable regulatory authorities may require the establishment of a similar strategy. Such a strategy may, for instance, restrict distribution of our drug candidates, require patient or physician education, or impose other burdensome implementation requirements on us.

Regulatory approval may be substantially delayed or may not be obtained for one or all of our drug candidates if regulatory authorities require additional time or studies to assess the safety or efficacy of our drug candidates.

We currently do not have any drug candidates that have gained approval for sale by the FDA, NMPA or EMA or other regulatory authorities in any other country, and we cannot guarantee that we will ever have marketable drugs. Our business is substantially dependent on our ability to complete the development of, obtain marketing approval for and successfully commercialize drug candidates in a timely manner. We cannot commercialize drug candidates without first obtaining marketing approval from the FDA, NMPA, EMA and comparable regulatory authorities. In the U.S., we hope to file INDs for the drug candidates from our Lead Projects and, subject to the approval of IND, Phase 1 clinical trials in humans. Even if we are permitted to commence such clinical trials, they may not be successful and regulators may not agree with our conclusions regarding the data generated by our clinical trials.

We may be unable to complete development of our drug candidates or initiate or complete development of any future drug candidates we may develop on our projected schedule. While we believe that our existing cash will likely enable us to complete the preclinical development of at least one of our current Lead Projects, even assuming we can complete such preclinical studies for any drug candidate by 2021, the full clinical development, manufacturing and launch of that drug candidate, will take significant additional time and likely require funding beyond the existing cash. In addition, if regulatory authorities require additional time or studies to assess the safety or efficacy of our drug candidates, we may not have or be able to obtain adequate funding to complete the necessary steps for approval for our drug candidates or any future drug candidates.

Preclinical studies in animals and clinical trials in humans to demonstrate the safety and efficacy of our drug candidates are time-consuming, expensive and take several years or more to complete. Delays in preclinical or clinical trials, regulatory approvals or rejections of applications for regulatory approval in the U.S., Europe, the PRC or other markets may result from many factors, including but not limited to:

- our inability to obtain sufficient funds required to conduct or continue a trial, including lack of funding due to unforeseen costs or other business decisions;
- regulatory reports for additional analysts, reports, data, preclinical studies and clinical trials;
- failure to reach agreement with, or inability to comply with conditions imposed by the FDA, NMPA, EMA or other regulators regarding the scope or design of our clinical trials;
- regulatory questions regarding interpretations of data and results and the emergence of new information regarding our drug candidates or other products;
- delay or failure in obtaining authorization to commence a clinical trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;
- withdrawal of clinical trial sites from our clinical trials as a result of changing standards of care or the ineligibility of a site to participate in our clinical trials;
- unfavorable or inconclusive results of clinical trials and supportive non-clinical studies, including unfavorable results regarding effectiveness of drug candidates during clinical trials;
- difficulty in maintaining contact with patients during or after treatment, resulting in incomplete data;
- our inability to obtain approval from IRBs or ethics committees to conduct clinical trials at their respective sites;
- our inability to enroll and retain a sufficient number of patients who meet the inclusion and exclusion criteria in a clinical trial;
- our inability to conduct a clinical trial in accordance with regulatory requirements or our clinical protocols;
- clinical sites and investigators deviating from trial protocol, failing to conduct the trial in accordance with regulatory requirements, withdrawing from or dropping out of a trial, or becoming ineligible to participate in a trial;
- failure of our clinical trial managers to satisfy their contractual duties or meet expected deadlines;
- manufacturing issues, including problems with manufacturing or timely obtaining from third parties sufficient quantities of a drug candidate for use in a clinical trial;
- ambiguous or negative interim results, or results that are inconsistent with earlier results;
- feedback from the FDA, NMPA, EMA, an IRB, data safety monitoring boards, or comparable entities, or results from earlier stage or concurrent studies in animals and clinical trials, regarding our drug candidates, including which might require modification of a trial protocol;
- unacceptable risk-benefit profile or unforeseen safety issues or adverse side effects; and
- a decision by the FDA, NMPA, EMA, an IRB, comparable entities, or the Company, or recommendation by a data safety monitoring board or comparable regulatory entity, to suspend or terminate clinical trials at any time for safety issues or for any other reason.

Changes in regulatory requirements and guidance may also occur, and we may need to amend clinical trial protocols submitted to applicable regulatory authorities to reflect these changes. Amendments may require us to resubmit clinical trial protocols to IRBs or ethics committees for re-examination, which may increase the costs or time required to complete a clinical trial.

If we experience delays in the completion of, or the termination of, a clinical trial, of any of our drug candidates, the commercial prospects of our drug candidates will be harmed, and our ability to generate product sales revenues from any of those drug candidates will be delayed. In addition, any delay in completing our clinical trials will increase our costs, slow down our drug candidate development and approval process, and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our drug candidates.

If we are required to conduct additional clinical trials or other studies with respect to any of our drug candidates beyond those that we initially contemplated, if we are unable to successfully complete our clinical trials or other studies or if the results of these studies are not positive or are only modestly positive, we may be delayed in obtaining regulatory approval for that drug candidate, we may not be able to obtain regulatory approval at all or we may obtain approval for indications that are not as broad as intended. Our product development costs will also increase if we experience delays in testing or approvals, and we may not have sufficient funding to complete the testing and approval process. Significant clinical trial delays could allow our competitors to bring their products to market before we do and impair our ability to commercialize our drugs, if and when approved. If any of this occurs, our business will be materially harmed.

Our drug candidates may cause undesirable adverse events or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following any regulatory approval.

Undesirable adverse events caused by our drug candidates or any future drug candidates we may develop could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, NMPA, EMA or other comparable regulatory authorities. Results of our potential clinical trials could reveal a high and unacceptable severity or prevalence of adverse effects. In such event, our trials could be suspended or terminated and the FDA, NMPA, EMA or other comparable regulatory authorities could order us to cease further development of, or deny approval of, our drug candidates for any or all target indications. Drug-related adverse events could also affect patient recruitment or the ability of enrolled subjects to complete the trial, could result in potential product liability claims and may harm our reputation, business, financial condition and business prospects significantly.

Additionally, if any of our current or future drug candidates receives regulatory approval, and we or others later identify undesirable side effects caused by such drugs, a number of potentially significant negative consequences could result, including but not limited to:

- suspending the marketing of the drug;
- having regulatory authorities withdraw approvals of the drug;
- adding warnings on the label;
- developing a REMS for the drug or, if a REMS is already in place, incorporating additional requirements under the REMS, or to develop a similar strategy as required by a comparable regulatory authority;

- conducting post-market studies;
- being sued and held liable for harm caused to subjects or patients; and
- damage to our reputation.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular drug candidate, if approved, and could significantly harm our business, results of operations and prospects.

Even if we receive regulatory approval for our drug candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our drug candidates.

If our drug candidates or any future drug candidates we develop are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable regulatory authorities outside of the United States.

Manufacturers and manufacturers' facilities are required to comply with extensive requirements from the FDA, NMPA, EMA and comparable regulatory authorities, including, in the United States, ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our drug candidates may be subject to limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the drug candidate. The regulatory authorities may also require risk management plans or programs as a condition of approval of our drug candidates (such as REMS of the FDA and risk-management plan of the EMA), which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA, NMPA, EMA or a comparable regulatory authority approves our drug candidates, we will have to comply with requirements including, for example, submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGCP and cGMP, for any clinical trials that we conduct post-approval.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the drug reaches the market. Later discovery of previously unknown problems with our drug candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our drug candidates, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, untitled or warning letters, or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- product seizure or detention, or refusal to permit the import or export of our drug candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Companies may promote drugs only for the approved indications and in accordance with the provisions of the approved label and may not promote drugs for any off-label use, such as uses that are not described in the product's labeling and that differ from those approved by the regulatory authorities. However, physicians may prescribe drug products for off-label uses and such off-label uses are common across some medical specialties. Thus, they may, unbeknownst to us, use our product for an "off label" indication for a specific treatment recipient. The FDA, NMPA, EMA and other regulatory authorities actively enforce the laws and regulations prohibiting the promotion of off-label uses, and if we are found to be out of compliance with the requirements and restrictions imposed on us under those laws and restrictions, we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions, and the off-label use of our products may increase the risk of product liability claims. In addition, management's attention could be diverted from our business operations and our reputation could be damaged.

The policies of the FDA, NMPA, EMA and other regulatory authorities may change and we cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any regulatory approval that we may have obtained and we may not achieve or sustain profitability.

Risks Related to Commercialization of Our Drug Candidates

Even if any of our drug candidates receive regulatory approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

After we complete clinical trials and receive regulatory approval for any of our drug candidates, which may not happen for some time, we recognize that such candidate(s) may ultimately fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. We may not be able to achieve or maintain market acceptance of our products over time if new products or technology are introduced that are more favorably received than our products, are more cost effective or render our drug obsolete. We will face competition with respect to our drug candidates from other pharmaceutical companies developing products in the same disease/therapeutic area and specialty pharmaceutical and biotechnology companies worldwide. Many of the companies against which we may be competing have significantly greater financial resources and expertise in research and development, manufacturing, animal testing, conducting clinical trials, obtaining regulatory approvals and marketing approval for drugs than we do. Physicians, patients and third-party payors may prefer other novel products to ours, which means that we may not generate significant sales revenues for that product and that product may not become profitable. The degree of market acceptance of our drug candidates, if approved for commercial sale, will depend on a number of factors, including but not limited to:

- clinical indications for which our drug candidates are approved;
- physicians, hospitals, and patients considering our drug candidates as a safe and effective treatment;
- the potential and perceived advantages of our drug candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA, NMPA, EMA or other comparable regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA, NMPA, EMA or other comparable regulatory authorities;
- the timing of market introduction of our drug candidates as well as competitive drugs;
- the cost of treatment in relation to alternative treatments and their relative benefits;
- the availability of adequate coverage, reimbursement and pricing by third-party payors and government authorities;
- lack of experience and financial and other limitations on our ability to create and sustain effective sales and marketing efforts or ineffectiveness of our sales and marketing partners; and
- changes in legislative and regulatory requirements that could prevent or delay regulatory approval of our drug candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any drug candidates for which we obtain regulatory approval.

Risks Related to Our IP

A significant portion of our IP portfolio currently includes pending patent applications that have not yet been issued as granted patents and if the pending patent applications covering our product candidates fail to be issued, our business will be adversely affected. If we or our licensors are unable to obtain and maintain patent protection for our technology and drugs, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be adversely affected.

Our success depends largely on our ability to obtain and maintain patent protection and other forms of IP rights for the composition of matter, method of use and/or method of manufacture for each of our drug candidates. Failure to obtain, maintain protection, enforce or extend adequate patent and other IP rights could materially adversely affect our ability to develop and market one or more of our drug candidates. We also rely on trade secrets and know-how to develop and maintain our proprietary and IP position for each of our drug candidates. Any failure to protect our trade secrets and know-how with respect to any specific drug and device candidate could adversely affect the market potential of that potential product.

As of the date of this report, the Company has, through its licenses, obtained rights to patents and patent applications covering some or all its drug and device candidates that have been filed in major jurisdictions such as the United States, member states of the European Patent Organization (the "EPO") and the PRC (collectively, "Major Patent Jurisdictions"), as well as in other countries. We have also filed a number of provisional applications to establish earlier filing dates for certain of our other ongoing researches, the specifics of which are currently proprietary and confidential. To the extent we do not seek or obtain patent protection in a particular jurisdiction, we may not have commercial incentive to seek marketing authorization in such jurisdiction. Nonetheless, other parties might enter those markets with generic versions or copies of our products and received regulatory approval without having significantly invested in their own research and development costs compared to the Company's investment. For more information about our IP portfolio, please refer to the Intellectual Property section below.

With respect to issued patents in certain jurisdictions, for example in the U.S. and under the EPO, we may be entitled to obtain a patent term extension to extend the patent expiration date provided we meet the applicable requirements for obtaining such patent term extensions. We have sought to support our proprietary position by working with our licensors in filing patent applications in the names of the licensors in the United States and through the PCT, related to the Lead Projects and certain other drug candidates. In the future, we intend to file patent applications on supplemental or improvement IP derived from the licensed technologies, where those IP would be solely or jointly owned by the Company pursuant to the terms of respective license agreements. Filing patents covering multiple technologies in multiple countries is time-consuming and expensive, and we may not have the resources file and prosecute all necessary or desirable patent applications in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

We cannot be certain that patents will be issued or granted with respect to patent applications that are currently pending, or that issued or granted patents will not later be found to be invalid or unenforceable.

The patent position of biotechnology and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations. The standards applied by the EPO, the U.S. Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and pharmaceutical patents. Consequently, patents may not issue from our pending patent applications and even if they do issue, such patents may not issue in a form that effectively prevents others from commercializing competing products. As such, we do not know the degree of future protection that we will have on our proprietary products and technology.

Additionally, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Even if patents do successfully issue and even if such patents cover our drug candidates, other parties may initiate, for patents filed before March 16, 2013 (i.e., the enactment of the America Invents Act), interference or re-examination proceedings, for patents filed on or after March 16, 2013, post-grant review, *inter partes* review, nullification or derivation proceedings, in court or before patent offices, or similar proceedings challenging the validity, enforceability or scope of such patents, which may result in the patent claims being narrowed or invalidated. Successful defense of its patents can constitute a material factor in a company's expenses. According to an August 2017 article published by Bloomberg News (<https://www.bna.com/cost-patent-infringement-n73014463011/>), depending on the value at stake, the American Intellectual Property Law Association's "2017 Report of the Economic Survey" reported the average cost of a patent litigation in 2017 to be \$1.7 million.

In addition, the fact that the Company has exclusive rights to prevent others from using a patented invention does not necessarily mean that the Company itself will have the unrestricted right to use that invention. Other parties may obtain ownership or licenses to patents or other IP rights that cover the manufacture, use or sale of our current or future products (or elements thereof). This may enable such other parties to enforce their patents or IP rights against us, and may, as a result, affect the commercialization of our products or exploitation of our own technology. We endeavor to identify early patents and patent applications which may block development of a product or technology and minimize this risk by conducting prior art searches before and during the projects. However, relevant documents may be overlooked, yet-to-be published or missed, which may in turn impact on the freedom to commercialize the relevant asset. In such cases, we may not be in a position to develop or commercialize products or drug candidates unless we successfully pursue litigation to nullify or invalidate the other IP rights concerned, or enter into a license agreement with the IP right holder, if available on commercially reasonable terms.

If we are unable to obtain and maintain the appropriate scope for our patents, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be adversely affected.

We may not obtain sufficient claim scope in those patents to prevent another party from competing successfully with our drug and device candidates. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technology or drug and device candidates in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop or prevent us from stopping others from using or commercializing similar or identical technology and drug and device candidates, or limit the duration of the patent protection of our technology and drug and device candidates. Given the amount of time required for the development, testing and regulatory review of new drug and device candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing drug and device candidates similar or identical to ours.

Further, the issuance, scope, validity, enforceability and commercial value of our and our current or future licensors' or collaboration partners' patent rights are highly uncertain. Our and our licensors' pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products.

We may not be able to protect and enforce our IP rights throughout the world.

Our commercial success will depend, in part, on our ability to maintain IP protection for our drug candidates in which we seek to develop and commercialize. While we rely primarily upon a combination of patents, trademarks, trade secrets and other contractual obligations to protect the IP related to our brands, products and other proprietary technologies, these legal means may afford only limited protection.

Filing and prosecuting patents on drug candidates and defending the validity of the same (if challenged) in all countries throughout the world could be prohibitively expensive for us, and our IP rights in countries outside the Major Patent Jurisdictions can be less extensive than those in the Major Patent Jurisdictions. In addition, the laws of some countries in the rest of the world such as India do not protect IP rights to the same extent as laws in the Major Patent Jurisdictions. Consequently, we may not be able to prevent other parties from practicing our inventions in the rest of the world. Competitors may use our technology in jurisdictions where we have not or not yet obtained patent protection to develop their own drugs and further, may export otherwise infringing drugs to non-U.S. jurisdictions where we have patent protection.

Our, our licensors' or collaboration partners' patent applications cannot be enforced against other parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology. In addition, patents and other IP rights also will not protect our technology, drug candidates if another party, including our competitors, design around our protected technology, drug candidates without infringing, misappropriating or otherwise violating our patents or other IP rights.

Moreover, currently and as our R&D continues to progress, some of our patents and patent applications are or may be co-owned with another party. Some of our licenses already provide that future-developed technologies (and any resulting patents) will be co-owned with the licensors and other patents for technologies we may acquire or develop with other parties may also be jointly owned. If we are unable to obtain an exclusive license to any such co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other persons, including our competitors, and our competitors could market competing products and technology, and we will be unable to transfer or grant exclusive rights to potential purchasers or development partners of such co-owned technologies. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against other parties, and such cooperation may not be provided to us. Any of the foregoing could limit the revenue we might generate from our patents or patent applications and thus have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Because patent applications are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors or collaborators were or will be the first to file any patent application related to a drug or device candidate. Furthermore, in the United States, if patent applications of other parties have an effective filing date before March 16, 2013, an interference proceeding can be initiated by such other party to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If patent applications of other parties have an effective filing date on or after March 16, 2013, in the United States a derivation proceeding can be initiated by such other parties to determine whether our invention was derived from theirs.

Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing our invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. In addition, we may be subject to other challenges regarding our exclusive ownership of our IP. If another party were successful in challenging our exclusive ownership of any of our IP, we may lose our right to use such IP, such other party may be able to license such IP to other parties, including our competitors, and our competitors could market competing products and technology. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Many companies have encountered significant problems in protecting and defending IP rights in jurisdictions outside Major Patent Jurisdictions. The legal systems of some countries do not favor the enforcement of patents, trade secrets and other IP, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other IP rights, or the marketing of competing drugs in violation of our proprietary rights generally.

To date, we have not sought to enforce any issued patents in any jurisdictions. Proceedings to enforce our patent and other IP rights in any jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business.

Furthermore, such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke other parties to assert claims of infringement or misappropriation against us. We may not prevail in any lawsuits that we initiate in jurisdictions where opposition proceedings are available and the damages or other remedies awarded, if any, may not be commercially meaningful. The requirements for patentability may differ in certain countries, particularly developing countries. Certain countries in Europe, the PRC, and developing countries including India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to another party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our IP rights around the world may be inadequate to obtain a significant commercial advantage from the IP that we develop.

We may become involved in lawsuits to protect or enforce our IP, which could be expensive, time-consuming and unsuccessful. Our patent rights relating to our drug and device candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable non-U.S. authority.

Competitors may infringe our patent rights or misappropriate or otherwise violate our IP rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our IP rights, to protect our trade secrets or determine the validity and scope of our own IP rights or the proprietary rights of others. This can be expensive and time-consuming. Any claim that we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe their IP rights. Many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce and/or defend their IP rights than we can. Accordingly, despite our efforts, we may not be able to prevent other parties from infringing upon or misappropriating our IP. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that patent rights or other IP rights owned by us are invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patent rights or other IP rights do not cover the technology in question. An adverse result in any litigation proceeding could put our patent, as well as any patents that may issue in the future from our pending patent applications, at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with IP litigation, there is risk that some of our confidential information could be compromised by disclosure during this type of litigation.

If we initiate legal proceedings against another party to enforce our patent, or any patents that may be issued in the future from our patent applications, that relates to one of our drug and device candidates, the defendant could counterclaim that such patent rights are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which another party can assert invalidity or unenforceability of a patent. Parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include ex parte re-examination, *inter partes* review, post-grant review, derivation and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our drug and device candidates. With respect to the validity of our patents, for example, there may be invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our drug and device candidates. Such a loss of patent protection could have a material adverse impact on our business.

We may not be able to prevent misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States. Furthermore, because of the substantial amount of discovery required in connection with IP litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

We may be subject to claims challenging the inventorship of our patents and other IP.

Although we are not currently experiencing any claims challenging the inventorship of our patents or ownership of our IP, we may in the future be subject to claims that former employees, collaborators or other parties have an interest in our patents or other IP as inventors or co-inventors. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our drug and device candidates and who have not clearly contracted to transfer or assign any rights they may have to the Company. In addition, for our licensed patents, although a majority of our licensors have procured assignment forms and records from inventors to affirm their ownership in the licensed IP, another party or former employee or collaborator of our licensors not named in the patents may challenge the inventorship of claim an ownership interest in one or more of our or our licensors' patents. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose rights such as exclusive ownership of, or right to use, our patent rights or other IP. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

If we are sued for infringing IP rights of other parties, such litigation could be costly and time-consuming and could prevent or delay us from developing or commercializing our drug candidates, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends in part on our avoiding infringement of the patents and other IP rights of other parties. There is a substantial amount of litigation involving patent and other IP rights in the biotechnology and pharmaceutical industries. Numerous issued patents, provisional patents and pending patent applications, which are owned by other parties, exist in the fields in which we are developing drug candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our drug candidates may give rise to claims of infringement of the patent rights of others.

Other parties may assert that we are employing their proprietary technology without authorization. There may be other patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our drug candidates. Because patent applications can take many years to issue, there may be currently pending patent applications or provisional patents which may later result in issued patents that our drug candidates may infringe. In addition, other parties may obtain patents in the future and claim that use of our technology infringes upon these patents. If any other patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our drug candidates, any molecules formed during the manufacturing process or any final drug itself, the holders of any such patents may be able to prevent us from commercializing such drug candidate unless we obtain a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. Similarly, if any other patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy or patient selection methods, the holders of any such patent may be able to block our ability to develop and commercialize the applicable drug candidate unless we obtain a license, limit our uses, or until such patent expires, or is finally determined to be held invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all.

Other parties who bring successful claims against us for infringement of their IP rights may obtain injunctive or other equitable relief, which could prevent us from developing and commercializing one or more of our drug candidates. Defense of these claims, regardless of their merits, would involve substantial litigation expense and be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement or misappropriation against us, we may have to pay substantial damages, including treble damages and attorneys' fees in the case of willful infringement, obtain one or more licenses from other parties, pay royalties or redesign our infringing drug candidates, which may be impossible or require substantial time and monetary expenditure. In the event of an adverse result in any such litigation, or even in the absence of litigation, we may need to obtain licenses from other parties to advance our research or allow commercialization of our drug candidates. Any required license may not be available at all, or may not be available on commercially reasonable terms. In the event that we are unable to obtain such a license, we would be unable to further develop and commercialize one or more of our drug candidates, which could harm our business significantly. We may also elect to enter into license agreements in order to settle patent infringement claims or resolve disputes prior to litigation, and any such license agreements may require us to pay royalties and other fees that could significantly reduce our profitability for any product related to that patent and thus harm our business.

Even if resolved in our favor, litigation or other legal proceedings relating to IP claims may cause us to incur significant expenses, and could distract our technical personnel, management personnel, or both from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the market price of our Class A Ordinary Shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

There may be patent applications pending of which we are not aware, but which cover similar products to the ones we are attempting to license or develop, which may result in lost time and money, as well as litigation.

It is possible that we have failed to identify relevant outstanding patents or applications. For example, U.S. applications filed before November 29, 2000 and certain U.S. applications filed after that date that will not be filed outside the United States remain confidential until patents are issued. Patent applications filed in the United States after November 29, 2000 and generally filed elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our products could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our products or the use of our products. Holders of any such unanticipated patents or patent applications may actively bring infringement claims against us, with the same potential litigation consequences as alluded to elsewhere in this annual report. Any of these events could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and other patent agencies in several stages over the lifetime of the patent. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Although an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly submit documents requesting an extension of time. In any such event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

The terms of our patents may not be sufficient to effectively protect our drug and device candidates and business.

In most countries in which we file, including the United States, the term of an issued patent is generally 20 years from the earliest claimed filing date of a non-provisional patent application in the applicable country. Although various extensions may be available, the life of a patent and the protection it affords is limited. For example, depending upon the timing, duration and specifics of the FDA regulatory approval for our drug candidates, one or more of our U.S. patents, if issued, might be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent term extension of up to five years as compensation for patent term lost during drug development and the FDA regulatory review process. Patent term extensions, however, cannot extend the remaining term of a patent beyond a total of 14 years from the date of drug approval by the FDA, and only one patent can be extended for a particular drug. The application for patent term extension is subject to approval by the USPTO, in conjunction with the FDA. We may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain a patent term extension for a given patent or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our drug will be that of the originally issued patents themselves.

Even if patents covering one of our drug candidates are obtained, thereby giving us a period of exclusivity for manufacturing and marketing that drug, we will not be able to assert such patent rights upon the expiration of the issued patents against potential competitors who may begin marketing generic copies of our medications, and our business and results of operations may be adversely affected.

Changes in patent law in the United States could diminish the value of patents in general, thereby impairing our ability to protect our drug and device candidates.

The United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained, if any. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents in the United States could change in unpredictable ways that would weaken our ability to obtain new patents, or to enforce our existing patents and patents that we might obtain in the future. For example, in a recent case, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, the U.S. Supreme Court held that certain claims to naturally-occurring substances are not patentable. Although we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patent rights. There could be similar changes in the laws of foreign jurisdictions that may impact the value of our patent rights or our other IP rights.

In addition, recent patent reform legislation in the U.S., including the Leahy-Smith America Invents Act, or the America Invents Act, could increase those uncertainties and costs. The America Invents Act was signed into law on September 16, 2011, and many of the substantive changes became effective on March 16, 2013. The America Invents Act reforms U.S. patent law in part by changing the U.S. patent system from a “first to invent” system to a “first inventor to file” system, expanding the definition of prior art, and developing a post-grant review system, thus changing the U.S. patent law in a way that may weaken our ability to obtain patent protection in the U.S. for those applications filed after March 16, 2013. Further, the America Invents Act created new procedures to challenge the validity of issued patents in the U.S., including post-grant review and *inter partes* review proceedings, which some other parties have been using to cause the cancellation of selected or all claims of issued patents of competitors. For a patent with an effective filing date of March 16, 2013 or later, a petition for post-grant review can be filed by another party in a nine-month window from issuance of the patent. A petition for *inter partes* review can be filed immediately following the issuance of a patent if the patent has an effective filing date prior to March 16, 2013. A petition for *inter partes* review can be filed after the nine-month-period for filing a post-grant review petition has expired for a patent with an effective filing date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of invalidity, whereas *inter partes* review proceedings can only raise an invalidity challenge based on published prior art and patents. These adversarial actions at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower burden of proof than used in litigation in U.S. federal courts. Therefore, it is generally considered easier for a competitor or other party to have a U.S. patent invalidated in a USPTO post-grant review or *inter partes* review proceeding than invalidated in a litigation in a U.S. federal court. If any of our patents are challenged by another party in such a USPTO proceeding, there is no guarantee that we or our licensors or collaborators will be successful in defending the patent, which would result in our loss of the challenged patent right.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to our issued patents, provisional patent, and pending patent applications, we expect to rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position and protect our drug and device candidates. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties that have access to them, such as our employees, corporate collaborators, outside scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. However, any of these parties may breach such agreements and disclose our proprietary information, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. If trade secrets which are material to our business were to be obtained by a competitor, our competitive position would be harmed.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed IP, including trade secrets or other proprietary information, of any such employee’s former employer. In addition, while we typically require our employees, consultants and contractors who may be involved in the development of IP to execute agreements assigning such IP to us, we may be unsuccessful in executing such an agreement with each party who in fact develops IP that we regard as our own, which may result in claims by or against us related to the ownership of such IP. We are not aware of any threatened or pending claims that any of our projects involve misappropriated IP or other proprietary information, but in the future litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable IP rights. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

We may be unable to execute on the optimal development plan for one or more of our existing product candidates if we are unable to obtain or maintain necessary rights for some aspect of the developing technology through acquisitions or licenses.

Our existing programs currently use or may in the future use additional technologies subject to proprietary rights held by others, such as particular compositions or methods of manufacture, treatment or use. The licensing and acquisition of IP rights is a competitive area, and more established companies may pursue strategies to license or acquire such IP rights that we may consider necessary or useful. These established companies may have a competitive advantage over us due to their size, cash resources and greater capabilities in clinical development and commercialization.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire IP rights on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain or maintain licenses or other rights from other parties to use IP of those parties, our business, financial condition and prospects for growth could suffer.

If we fail to comply with our obligations in the agreements under which we license IP rights from other parties or otherwise experience disruptions to our business relationships with our licensors, we could be required to pay monetary damages or could lose license rights that are important to our business.

Many of our projects (including our Lead Projects) are based on IP which we have licensed from other parties. (See “Item 4. Information on the Company – B. Business Overview – Intellectual Property”) Certain of these license agreements impose diligence, development or commercialization obligations on us, such as obligations to pay royalties on net product sales of our drug and device candidates once commercialized by us, to pay a percentage of sublicensing revenues if the licensed product is sublicensed, to make other specified milestone and/or annual payments relating to our drug candidates or to pay license maintenance and other fees, as well as obligations to pursue commercialization with due diligence. Specifically, a number of our license agreements also require us to meet development timelines in order to maintain the related license(s). In spite of our efforts, our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore seek to terminate the license agreements. If one of our licensors, despite our efforts, were to be successful in terminating its agreement with us, we would not be able to continue to develop, manufacture or market any drug candidate under that license agreements, and we could face claims for monetary damages or other penalties under that agreement. Such an occurrence would diminish or eliminate the value of that project to our Company, even if we are able to negotiate new or reinstated agreements, which may have less favorable terms. Depending on the importance of the IP and the related project, any such development could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, the agreements under which we currently license intellectual property or technology from other parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which (depending on the importance of the IP and the related project) could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangement for a project on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected drug or device candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

We may not have complete control of the preparation, filing and prosecution of patent applications, or to maintain patents, licensed by us from other parties.

The Company has in-licensed, and expects in the future to in-license patents owned or controlled by others for our use as part of our development plans. We also may out-license or sublicense patents which we own or control in collaborations with others for development and commercialization of our products. In either case, the continuing right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology under development is a matter for negotiation and we may not always be the party that obtains such control, in which case we will be reliant on our licensors, collaboration partners or sublicensees for determining strategies with respect to those patents. For our existing licenses, while we have an understanding with most of the licensors who maintain control over patent prosecution and we have jointly appointed and engaged patent agents nominated by us under one or more of our licenses, we cannot guarantee that such licensors or collaborators will always accept prosecution strategies proposed by us and/or our patent agents. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If our current or future licensors or collaboration partners fail to establish, maintain or protect such patents and other IP rights, such rights may be reduced or eliminated. If our licensors or joint development partners are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised.

Risks Related to Our Reliance on Unrelated Parties

We rely on unrelated parties to conduct discovery and further improvement of our innovations and licensed technologies, as well as our preclinical studies and clinical trials. If these unrelated parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our drug candidates, and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon CROs and collaborating institutions to monitor and manage data for our ongoing preclinical studies and programs. We rely on these parties for execution of preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, and regulatory requirements and scientific standards, and our reliance on the CROs and collaborating institutions does not relieve us of our regulatory responsibilities. If CROs, collaborating institutions or clinical investigators do not successfully carry out their contractual duties or obligations or meet expected deadlines, development of our product candidates could be delayed and our business could be adversely affected.

In addition, our CROs and collaborating institutions, are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and waste. In the event of contamination or injury resulting from our use of hazardous materials, we might be held liable for any resulting damages, and any liability could exceed our resources. We could also be subject to civil or criminal fines and penalties, and significant associated costs.

If the Company obtains approval of an IND for one of our drug candidates and moves into human clinical trials requiring significantly larger quantities of the candidate to be tested, we expect to rely on unrelated parties to manufacture supplies of that candidate. If those unrelated parties fail to provide us with sufficient quantities of clinical supply on that candidate or fail to do so at acceptable quality levels or prices, or fail to maintain required cGMP licenses, we may not be able to manufacture that candidate in sufficient quantities to conduct the necessary human trials. Should the failure by the CRO occur in anticipation of or after marketing approval of that candidate, we may be unable to generate as much revenue as rapidly (and such revenue may not be as profitable) as we had anticipated.

The manufacture of many drug products, particularly in commercial quantities, can be complex and may require significant expertise and capital investment, particularly if the development of advanced manufacturing techniques and process controls are required. If we obtain approval of an IND for any of our drug candidates, of which there can be no assurance, we intend to contract with outside contractors to manufacture clinical supplies and process our drug candidates. We have not yet had our drug candidates to be manufactured or processed on a commercial scale and may not be able to do so for any of our drug candidates.

As we expect to engage contract manufacturers, the Company will be exposed to the following risks:

- we might be unable to identify manufacturers on acceptable terms or at all because the FDA, NMPA, EMA or other comparable regulatory authorities must approve any manufacturers we determine to use and any potential manufacturer may be unable to satisfy federal, state or international regulatory standards;
- although we would be choosing manufacturers with the type of experience most suitable for our drug candidates, it is possible that our contract manufacturers may not be able to execute unique manufacturing procedures and other logistical support requirements we have developed and they might require a significant amount of support from us to implement and maintain the infrastructure and processes required to manufacture our particular drug candidates;
- our contract manufacturers might be unable to reproduce the quantity and quality of the drugs we need to meet our clinical and commercial needs within the time frames when we require those drugs;
- our contract manufacturers may breach their contracts with us, including by not performing as agreed or not devoting sufficient resources to our drug candidates, or they may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products;
- even if initially accepted by regulatory authorities, a manufacturer remains subject to ongoing periodic unannounced inspection by regulatory authorities to ensure strict compliance with cGMP and other government regulations, and our contract manufacturers may fail to comply with these regulations and requirements, resulting in rescission of cGMP licenses and our inability to continue using their services, requiring us to find a replacement manufacturer;
- depending on the terms of our agreement with a manufacturer, we may not own, or may have to share, the IP rights to any improvements made by the manufacturer in the manufacturing process for our drug candidates; and
- our contract manufacturers may have unacceptable or inconsistent product quality success rates and yields.

Each of these risks could delay or prevent the completion of our clinical trials or the approval of any of our drug candidates by the FDA, NMPA, EMA or other comparable regulatory authorities, result in higher costs or adversely impact commercialization of our drug candidates.

We are also responsible for quality control by our manufacturers. We intend to rely on those unrelated-party manufactures to perform certain quality assurance tests on our drug candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm and the FDA, NMPA, EMA or other comparable regulatory authorities could place significant restrictions on our Company until deficiencies are remedied.

Manufacturers of drug products often encounter difficulties in production, particularly in scaling up or out, validating the production process, and assuring high reliability of the manufacturing process (including the absence of contamination). These problems include logistics and shipping, difficulties with production costs and yields, quality control, including stability of the product, product testing, operator error, availability of qualified personnel, as well as compliance with strictly enforced federal, state and non-U.S. regulations. Furthermore, if contaminants are discovered in our supply of our drug candidates or in the manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. It is possible that stability failures or other issues relating to the manufacture of our drug candidates may occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints, or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide our drug candidate to patients in clinical trials would be jeopardized. Any delay or interruption in the manufacturing of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to begin new clinical trials with additional costs or terminate clinical trials completely.

Review of changes in the manufacturing process of our drug candidates could cause delays resulting from the need for additional regulatory approvals.

Changes in a process or procedure for manufacturing one of our drug candidates, including a change in the location where the drug candidate is manufactured or a change of a contract manufacturer, could require prior review by the FDA, NMPA, EMA or other comparable regulatory authorities and approval of the manufacturing process and procedures in accordance with the FDA, NMPA or EMA's regulations, or comparable requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. The new facility will also be subject to pre-approval inspection. In addition, we would have to demonstrate that the product made at the new facility is equivalent to the product made at the former facility by physical and chemical methods, which are costly and time-consuming. It is also possible that the FDA, NMPA, EMA or other comparable regulatory authorities may require clinical testing as a way to prove equivalency, which would result in additional costs and delay.

Risks Related to AML Clinic

Failure to comply with all laws and regulations applicable to the business of AML Clinic could have a material, adverse impact on the Company's business.

Operation of AML Clinic subjects the Company to a variety of Hong Kong laws and regulations specific to companies and professionals in the business of delivering medical care. We and our employees will be subject to licensing and professional qualifications that do not apply to our other businesses. Breach of any of these laws, regulations or licensing requirements could subject the Company to significant fines and other penalties and possibly damage the Company's reputation, which could have a material adverse effect on the Company's business.

Risks Related to Our Dietary Supplements

We may be subject to government regulations for dietary supplements

From a regulatory perspective, some of the Company's non-drug candidates (including those developed under the project company Nativus), may be regulated as dietary supplements, including DOI (NLS-2). For those non-drug candidates that the Company plans to develop, they are subject to extensive and rigorous domestic government regulation, including regulation by the FDA, the Centers for Medicare & Medicaid Services, or CMS, other divisions of the U.S. Department of Health and Human Services, state and local governments and their respective foreign equivalents. The FDA regulates dietary supplements, cosmetics and drugs under different regulatory schemes.

For example, the FDA regulates the processing, formulation, safety, manufacturing, packaging, labeling, advertising and distribution of dietary supplements and cosmetics under its dietary supplement and cosmetic authority, respectively. The FDA also regulates the research, development, pre-clinical and clinical testing, manufacture, safety, effectiveness, record keeping, reporting, labeling, storage, approval, advertising, promotion, sale, distribution, import and export of pharmaceutical products under various regulatory provisions. If any drug products we develop are tested or marketed abroad, they will also be subject to extensive regulation by foreign governments, whether or not we have obtained FDA approval for a given product and its uses. Such foreign regulation may be equally or more demanding than corresponding U.S. regulation.

Government regulation substantially increases the cost and risk of researching, developing, manufacturing and selling products. Our failure to comply with these regulations could result in, by way of example, significant fines, criminal and civil liability, product seizures, recalls, withdrawals, withdrawals of approvals and exclusion and debarment from government programs. Any of these actions, including the inability of our hormone therapy drug candidates to obtain and maintain regulatory approval, would have a materially adverse effect on our business, financial condition, results of operations and prospects.

In addition, the FDA's policies may change and additional government regulations may be issued that could prevent, limit, or delay regulatory approval of our drug candidates, or impose more stringent product labeling and post-marketing testing and other requirements.

We intend to market DOI (NLS-2) in Hong Kong. In Hong Kong, dietary supplements are defined as "health food" products. "Health food" containing medicines are subject to the Pharmacy and Poisons Ordinance (Cap 138) and such "health food" containing Chinese medicines are regulated by the Chinese Medicine Ordinance (Cap 549), where they must meet the requirements in respect of safety, quality and efficacy before they can be registered.

For other "health food" products which cannot be classified as Chinese medicine or western medicine are regulated under the Public Health and Municipal Services Ordinance (Cap 132) as general food products. The Public Health and Municipal Services Ordinance requires the manufacturers and sellers of food to ensure that their products are fit for human consumption and comply with the requirements in respect of food safety, food standards and labelling. In addition, all prepackaged food should bear labels which correctly list out the ingredients of the food under the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) under the Ordinance.

The DOI (NLS-2) is made with the bioactive ingredient extracted Chinese yam powder and does not contain any western or Chinese medicine; therefore, registration is not required under the local laws for marketing in Hong Kong. We will, however, ensure the compliance of the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) with by proper labelling in place.

Risks Related to Our Device Candidates

We are subject to risks related to obtaining regulatory approval for device candidates.

The Company's device candidates (including those being developed under SLS-1), are likely to be regulated as medical devices. Medical devices are subject to extensive regulations, supervised by regulatory authorities around the world, including the FDA, NMPA and applicable national authorities in relevant European countries. The regulatory framework related to medical devices covers research, development, design, manufacturing, safety, reporting, testing, labeling, packaging, storage, installation, servicing, marketing, sales and distribution. The Company is and may also be, in addition to these industry-specific regulations, subject to numerous other ongoing regulatory obligations, such as data protection, environmental, health and safety laws and restrictions. The costs of compliance with applicable regulations, requirements or guidelines could be substantial. Furthermore, the regulatory environment has generally become more stringent and extensive over time. Failure to comply with these regulations could result in sanctions including fines, injunctions, civil penalties, denial of applications for marketing approval of the Company's products, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions, partial suspension or total shutdown of production and criminal prosecutions, any of which could significantly increase the Company's costs, delay the development and commercialization of its device candidates.

We are subject to risks related to the carrying out and outcome of clinical trials of medical devices.

The Company may sponsor studies on human participants in clinical studies of its device candidates. Such clinical studies are performed to support regulatory approvals for market access or to generate evidence relating to clinical benefits and cost benefits of using such device candidates. Clinical studies are costly and time consuming and associated with risks such as finding trial sites, recruitment of suitable patients, the actual cost per patient exceeding budget and inadequacies in the execution of the trials. There is also a risk of delays in the performance of clinical studies, which can occur for a variety of reasons. For example, delays in obtaining regulatory approval to commence a trial, reaching agreements on acceptable terms with prospective contract research organizations ("CROs") and clinical investigational sites, obtaining institutional review board approval at each site, difficulties in patient enrolment, patients failing to complete a trial or return for follow-up, adding new sites or obtaining sufficient supplies of products or clinical sites dropping out of a trial. If delays persist, there is a risk that studies eventually are suspended or terminated if the delays occur due to circumstances that a sponsor of a clinical trial has difficulties controlling, or is unable to control, or if the measures required for conducting the studies further are deemed too costly or extensive in relation to the scopes and goals of the studies.

There are many factors which may affect patient enrollment. Amongst these are the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical study and competing clinical studies. Furthermore, clinicians' and patients' perceptions as to the potential advantages of the product being studied in relation to other available therapies, including any new products that may be approved for the indications the company is investigating. Clinical studies may also be suspended or terminated if participating subjects are exposed to unacceptable health risks or undesired side-effects.

Furthermore, there is a risk that clinical studies may not demonstrate the required clinical benefit for the prospective indication the trial is aimed at. Failure in premarketing clinical studies could lead to market clearance or approvals not being obtained which could delay or jeopardize the Company's ability to develop, market and sell the device candidates being studied. At any stage of the development, the Company may discontinue device candidate based on review of available preclinical and clinical data, the estimated costs of continued development, market considerations and other factors. Furthermore, with respect to the clinical studies of device candidates conducted by CROs and others, the Company may have less control over their timing or outcome.

Risks Related to Our Industry, Business and Operation

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research, development and clinic operations involve the use of hazardous materials, chemicals and various radioactive compounds/radiation and AML Clinic may create medical waste and radiation. Our R&D Center may maintain quantities of various flammable and toxic chemicals in our facilities that are required for our research, development and manufacturing activities. We are subject to local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials and of medical waste at the jurisdictions where we operate our clinic and research facilities, which are currently limited to Hong Kong. We believe our procedures for storing, handling and disposing of these materials comply with the relevant guidelines and laws of the jurisdictions in which our facilities are located. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials and medical waste.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties, if we violate any of these laws or regulations.

Our future success depends on our ability to retain our Chief Executive Officer, our scientific and clinical advisors, and other key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on Ian Huen, our Chief Executive Officer, as well as, other principal members of our management teams, scientific teams as well as scientific and clinical advisors. Although we have formal employment agreements, which we refer to as appointment letters, with all of our executive officers, these agreements do not prevent our executives from terminating their employment with us at any time, subject to applicable notice periods. Nevertheless, the loss of the services of any of these persons could impede the achievement of our research, development and commercialization objectives.

To induce valuable employees to remain at our Company, in addition to salary and cash incentives, we plan to provide share incentive grants that vest over time. The value to employees of these equity grants that vest over time may be significantly affected by movements in the price of our Class A Ordinary Shares that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Although we have appointment letters with our key employees, any of our employees could resign at any time, with 1-month to 3-months prior written notice or with payment in lieu of notice.

Recruiting and retaining qualified officers, scientific, clinical, sales and marketing personnel or consultants will also be critical to our success. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our discovery and preclinical studies development and commercialization strategy. The loss of the services of our executive officers or other key employees and consultants could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

Furthermore, replacing executive officers and key employees or consultants may be difficult and may take an extended period of time, because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drug and device candidates. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel or consultants on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel.

We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We will need to increase the size and capabilities of our organization, and we may experience difficulties in managing our growth.

As of the date of this annual report, we have 37 employees, including 36 full-time employees and 1 part-time employee. Of these, 12 are engaged in full-time research and development and laboratory operations, 18 are engaged in general and administrative functions, 6 are full-time employees engaged in the clinic operation and 1 part-time employee is engaged in legal clerical support. As of the date of annual report, 37 of our employees are located in Hong Kong. In addition, we have engaged and may continue to engage 39 independent contracted consultants and advisors to assist us with our operations. As our development and commercialization plans and strategies develop, and as we have transitioned into operating as a public company, we will need to establish and maintain effective disclosure and financial controls and make changes in our corporate governance practices. We will need to add a significant number of additional managerial, operational, sales, marketing, financial and other personnel with the appropriate public company experience and technical knowledge and we may not successfully recruit and maintain such personnel. Future growth will impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including clinical, the FDA or other comparable regulatory authority review process for our drug and device candidates, while complying with our contractual obligations to contractors and others; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize our drug candidates will depend, in part, on our ability to effectively manage our future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants for significant input in selecting and evaluating new products to pursue. These independent organizations, advisors and consultants may not continue to be available to us on a timely basis when needed, and in such case, we may not have the ability to find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities, or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval of our drug candidates or otherwise advance our business. Furthermore, we may not be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, if at all.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our drug and device candidates and, accordingly, may not achieve our research, development and commercialization goals.

We intend to seek additional collaborations, strategic alliances or acquisitions or enter into royalty-seeking or sublicensing arrangements in the future, but we may not realize the benefits of these arrangements.

We intend to form or seek strategic alliances, create joint ventures or collaborations, acquire complimentary products, IP rights, technology or businesses or enter into additional licensing arrangements with unrelated parties that we determine may complement or augment our development and commercialization efforts with respect to our drug and device candidates. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing shareholders, or disrupt our management and business.

We will face significant competition in seeking appropriate strategic partners and the negotiation process is likely to be time-consuming, costly and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or another alternative arrangement for any of our drug and device candidates because their state of development may be deemed to be too early for collaborative effort and others may not view our drug and device candidates as having the requisite potential to demonstrate safety and efficacy. If and when we enter into an agreement with a collaboration partner or sublicensee for development and commercialization of a drug or device candidate, we can expect to relinquish some or all of the control over the future success of that drug and device candidate to the unrelated-party.

Further, even if we enter into a collaboration involving any of our drug and device candidates, the arrangement will be subject to numerous risks, which may include the following:

- the collaborators will likely have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- the collaborator may ultimately choose not pursue development and commercialization of our drug candidates or may elect not to continue or renew development or commercialization programs, based on clinical trial results, changes in their strategic focus due to the acquisition of competitive drugs, availability of funding, or other external factors, such as a business combination that diverts resources or creates competing priorities;

- the collaborator may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a drug or device candidate, repeat or conduct new clinical trials, or require a new formulation of a drug or device candidate for clinical testing;
- the collaborator could independently develop, or develop with unrelated parties, drugs that compete directly or indirectly with our drugs or drug and device candidates;
- the collaborator with marketing and distribution rights to one or more drugs may not commit sufficient resources to their marketing and distribution;
- the collaborator may not properly maintain or defend our IP rights or may use our IP or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our IP or proprietary information or expose us to potential liability;
- disputes may arise between us and the collaborator that cause the delay or termination of the research, development or commercialization of our drug and device candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- the collaboration may be terminated and, if terminated, may result the Company needing additional capital to pursue further development or commercialization of the applicable drug and device candidates;
- the collaborator may own or co-own IP covering our drugs that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such IP;
- the collaboration may result in increased operating expenses or the assumption of indebtedness or contingent liabilities; and
- the collaboration arrangement may result in the loss of key personnel and uncertainties in our ability to maintain key business relationships.

As a result, if we enter into collaboration agreements and strategic partnerships or license our drugs, we may not be able to realize the benefit of such transactions, which could delay our timelines or otherwise adversely affect our business. Following a strategic transaction or license, we may not achieve the revenue or specific net income that justifies such transaction. If we are unable to reach agreements with a suitable collaborator on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a drug or device candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense.

If we fail to enter into collaborations, we may seek to fund and undertake development or commercialization activities on our own, but we may not have sufficient funds or expertise to undertake the necessary development and commercialization activities. In such a case, we may not be able to further develop our drug and device candidates or bring them to market and generate product sales revenue, which would harm our business prospects, financial condition and results of operations.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: comply with the laws of the FDA and other similar non-U.S. regulatory authorities; provide true, complete and accurate information to the FDA and other similar non-U.S. regulatory authorities; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar non-U.S. fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain the FDA approval for any of our drug and device candidates and begin commercializing those drugs in the United States, our potential exposure under U.S. laws will increase significantly and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with principal investigators of our sponsored researches and research patients and our use of information obtained in the course of patient recruitment for clinical trials, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally.

It is not always possible to identify and deter misconduct by employees and other parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC.

We believe that any disclosure controls and procedures, or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our Class A Ordinary Shares. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

If we fail to establish and maintain proper internal financial reporting controls, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to file a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. The presence of material weaknesses in internal control over financial reporting could result in financial statement errors which, in turn, could lead to errors in our financial reports and/or delays in our financial reporting, which could require us to restate our operating results. In connection with the audit of our financial statements for the year ended December 31, 2018 and the period March 1, 2017 through December 31, 2017, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting, as defined in the standards established by the Public Company Accounting Oversight Board of the United States. The material weakness identified was the lack of dedicated resources to take responsibility for the finance and accounting functions and the preparation of financial statements in compliance with generally accepted accounting principles in the United States, or U.S. GAAP.

In 2019, we took actions to remediate the abovementioned material weakness, and we believe we have remediated the material weakness by implementing the following measures:

- provide trainings to staff regarding to the preparation of financial statements in compliance with generally accepted accounting principles in the United States;
- change to a new and well-established accounting system to enhance effectiveness and financial and system control;
- establish clear roles and responsibilities for accounting and financial reporting staff to address finance and accounting issues; and
- continue to monitor the improvement on internal control over financial reporting.

As of December 31, 2019, we determined that the aforementioned measures have remediated the material weakness. However, since we are still in the process of replenishing and building up a qualified finance and accounting team with sufficient dedicated resources, our management assessed that the deficiency related to the lack of dedicated resources to take responsibility for the finance and accounting functions and the preparation of financial statements in compliance with generally accepted accounting principles in the United States, or U.S. GAAP, still existed as of December 31, 2019. Therefore, based on the definition of “material weakness” and “significant deficiency” in the standards established by the Public Company Accounting Oversight Board of the United States, our management concluded that the deficiency now only rises to the level of a significant deficiency. However, we cannot assure you that we will not identify additional material weaknesses or significant deficiencies in the future.

Our management concluded that our internal controls over financial reporting were effective as of December 31, 2019. However, if we fail to maintain effective internal controls over financial reporting in the future, our management and our independent registered public accounting firm may conclude that our internal control over financial reporting is not effective. Investors may lose confidence in our operating results, the price of the Class A Ordinary Shares could decline and we may be subject to litigation or regulatory enforcement actions. In addition, if we are unable to meet the requirements of Section 404 of the Sarbanes-Oxley Act, the Class A Ordinary Shares may not be able to remain listed on the NASDAQ Global Market.

We may market our products, if approved, globally; if we do, we will be subject to the risk of doing business internationally.

We operate and expect to operate in various countries, and we may not be able to market our products in, or develop new products successfully for, these markets. We may also encounter other risks of doing business internationally including but not limited to:

- unexpected changes in, or impositions of, legislative or regulatory requirements;
- efforts to develop an international sales, marketing and distribution organization may increase our expenses, divert our management’s attention from the acquisition or development of drug candidates or cause us to forgo profitable licensing opportunities in these geographies;
- the occurrence of economic weakness, including inflation or political instability;
- the effects of applicable non-U.S. tax structures and potentially adverse tax consequences;
- differences in protection of our IP rights including patent rights of other parties;
- the burden of complying with a variety of foreign laws including difficulties in effective enforcement of contractual provisions;
- delays resulting from difficulty in obtaining export licenses, tariffs and other barriers and restrictions, potentially longer payment cycles, greater difficulty in accounts receivable collection and potentially adverse tax treatment; and
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad.

In addition, we are subject to general geopolitical risks in foreign countries where we operate, such as political and economic instability and changes in diplomatic and trade relationships, which could affect, among other things, customers’ inventory levels and consumer purchasing, which could cause our results to fluctuate and our net sales to decline. The occurrence of any one or more of these risks of doing business internationally, individually or in the aggregate, could materially and adversely affect our business and results of operations.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our shareholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

We may evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary products, IP rights, technology or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including, but not limited to:

- increase in operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, IP and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing drugs or drug and device candidates and regulatory approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business.

If we fail to comply with the U.S. Foreign Corrupt Practices Act ("FCPA"), or other anti-bribery laws, our reputation may be harmed and we could be subject to penalties and significant expenses that have a material adverse effect on our business, financial condition and results of operations.

We are subject to the FCPA. The FCPA generally prohibits us from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. We are also subject to the anti-bribery laws of other jurisdictions, particularly the PRC. As our business expands, the applicability of the FCPA and other anti-bribery laws to our operations will increase. Our procedures and controls to monitor anti-bribery compliance may fail to protect us from reckless or criminal acts committed by our employees or agents. If we, due to either our own deliberate or inadvertent acts or those of others, fail to comply with applicable anti-bribery laws, our reputation could be harmed and we could incur criminal or civil penalties, other sanctions and/or significant expenses, which could have a material adverse effect on our business, including our financial condition, results of operations, cash flows and prospects.

If we commence clinical trials of one of our drug or device candidates, and product liability lawsuits are brought against us, we may incur substantial liabilities and the commercialization of such drug or device candidates may be affected.

If any of our drug or device candidates enter clinical trials, we will face an inherent risk of product liability suits and will face an even greater risk if we obtain approval to commercialize any drugs. For example, we may be sued if our drug candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the drug, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our drug candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our drugs;
- injury to our reputation;
- withdrawal of clinical trial participants and inability to continue clinical trials;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any drug candidate; and
- a decline in the price of our Class A Ordinary Shares.

We shall seek to obtain the appropriate insurance once our candidates are ready for clinical trial. However, our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of drugs we develop, alone or with collaborators. We currently do not have in place product liability insurance and although we plan to have in place such insurance as and when the products are ready for commercialization, as well as insurance covering clinical trials, the amount of such insurance coverage may not be adequate, we may be unable to maintain such insurance, or we may not be able to obtain additional or replacement insurance at a reasonable cost, if at all. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Additionally, we may be sued if the products that we commercialize, market or sell cause or are perceived to cause injury or are found to be otherwise unsuitable, and may result in:

- decreased demand for those products;
- damage to our reputation;
- costs incurred related to product recalls;
- limiting our opportunities to enter into future commercial partnership; and
- a decline in the price of our Class A Ordinary Shares.

Our insurance coverage may be inadequate to protect us against losses.

We currently maintain property insurance for our office premises (including one unit of server and accessories). We hold employer's liability insurance generally covering death or work-related injury of employees; we maintain "Office Care Plan Insurance" for those persons working in our offices and "Medical Plan" for our employee. We hold public liability insurance covering certain incidents involving unrelated parties that occur on or in the premises of the Company. We have directors and officers liability insurance. We do not have key-man life insurance on any of our senior management or key personnel, or business interruption insurance. Our insurance coverage may be insufficient to cover any claim for product liability, damage to our fixed assets or employee injuries. If any claims for damage are brought against us, or if we experience any business disruption, litigation or natural disaster, we might incur substantial costs and diversion of resources.

Fluctuations in exchange rates could result in foreign currency exchange losses

Our operations and equity are funded in U.S. dollars and we currently incur the majority of our expenses in U.S. dollars or in H.K. dollars. H.K. dollar is currently pegged to the U.S. dollar; however, we cannot guarantee that such peg will continue to be in place in the future. Our exposure to foreign exchange risk primarily relates to the limited cash denominated in currencies other than the functional currencies of each entity and limited revenue contracts dominated in H.K. dollars in certain Hong Kong operating entities. We do not believe that we currently have any significant direct foreign exchange risk and have not hedged exposures denominated in foreign currencies or any other derivative financial instruments.

If we are exposed to foreign currency exchange risk as our results of operations, cash flows maybe subject to fluctuations in foreign currency exchange rates. For example, if a significant portion of our clinical trial activities may be conducted outside of the United States, and associated costs may be incurred in the local currency of the country in which the trial is being conducted, which costs could be subject to fluctuations in currency exchange rates. We currently do not engage in hedging transactions to protect against uncertainty in future exchange rates between particular foreign currencies and the U.S. dollar. A decline in the value of the U.S. dollar against currencies in countries in which we conduct clinical trials could have a negative impact on our research and development costs. Foreign currency fluctuations are unpredictable and may adversely affect our financial condition, results of operations and cash flows.

Our investments are subject to risks that could result in losses.

We had unrestricted cash of \$5.19 million, \$12.01 million and \$16.25 million as of December 31, 2019, 2018 and 2017, respectively. We may invest our cash in a variety of financial instruments. All of these investments are subject to credit, liquidity, market and interest rate risk. Such risks, including the failure or severe financial distress of the financial institutions that hold our cash, cash equivalents and investments, may result in a loss of liquidity, impairment to our investments, realization of substantial future losses, or a complete loss of the investments in the long-term, which may have a material adverse effect on our business, results of operations, liquidity and financial condition. While we believe our cash position does not expose us to excessive risk, future investments may be subject to adverse changes in market value.

We are exposed to risks associated with our computer hardware, network security and data storage.

Similar to all other computer network users, our computer network system is vulnerable to attack of computer virus, worms, trojan horses, hackers or other similar computer network disruptive problems. Any failure in safeguarding our computer network system from these disruptive problems may cause breakdown of our computer network system and leakage of confidential information of the Company. Any failure in the protection of our computer network system from external threat may disrupt our operation and may damage our reputation for any breach of confidentiality to our customers, which in turn may adversely affect our business operation and performance. In the event that our confidential information is stolen and misused, we may become exposed to potential risks of losses from litigation and possible liability.

In addition, we are highly dependent on our IT infrastructure to store research data and information and manage our business operations. We do not backup all data on a real-time basis and the effectiveness of our business operations may be materially affected by any failure in our IT infrastructure. If our communications and IT systems do not function properly, or if there is any partial or complete failure of our systems, we could suffer financial losses, business disruption or damage to our reputation.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our research institution collaborators, CROs, suppliers and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, damage from computer viruses, material computer system failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions. In addition, we partially rely on our research institution collaborators for conducting research and development of our drug candidates, and they may be affected by government shutdowns or withdrawn funding. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on contract manufacturers to produce and process our drug candidates. Our ability to obtain clinical supplies of our drug candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption. A large portion of our contract manufacturer's operations is located in a single facility. Damage or extended periods of interruption to our corporate or our contract manufacturer's development or research facilities due to fire, natural disaster, power loss, communications failure, unauthorized entry or other events could cause us to cease or delay development of some or all of our drug candidates.

Although we do not currently conduct any business in the PRC, we may in the future; in doing so we would be exposed to various risks related to doing business in the PRC.

Although we currently do not conduct any business in the PRC, we are the exclusive licensee to certain PRC patents directed to our drug candidates, and we intend to file application for certain products in the PRC. The pharmaceutical industry in the PRC is subject to comprehensive government regulation and supervision, encompassing the approval, registration, manufacturing, packaging, licensing and marketing of new drugs. (See "Item 4. Information on the Company – B. Business Overview – Regulations"). In recent years, the regulatory framework in the PRC regarding the pharmaceutical industry has undergone significant changes, and we expect that it will continue to undergo significant changes. Any such changes or amendments may result in increased compliance costs on our business or cause delays in or prevent the successful development or commercialization of our drug candidates in the PRC and reduce the current benefits that we believe are available to us from developing and manufacturing drugs in the PRC. Chinese authorities have become increasingly vigilant in enforcing laws in the pharmaceutical industry and any failure by us or our partners to maintain compliance with applicable laws and regulations or obtain and maintain required licenses and permits may result in the suspension or termination of our business activities in the PRC. We believe our strategy and approach is aligned with the PRC government's policies, but we cannot ensure that our strategy and approach will continue to be aligned.

If in the future, we commence business or operation in the PRC, changes in the political and economic policies of the PRC government may materially and adversely affect our business, financial condition and results of operations and may result in our inability to sustain our growth and expansion strategies. Once we start doing business in the PRC, our financial condition and results of operation in the PRC could be materially and adversely affected by government control over capital investments or changes in tax regulations that are applicable to us, and consequently have a material adverse effect on our businesses, financial condition and results of operations.

The SEC could take the position that we are an "investment company" subject to the extensive requirements of the Investment Company Act of 1940. Such a characterization and the associated compliance requirements could have a material adverse effect on our business, financial condition, and results of operations.

Our business had historically included passive healthcare related investments in early stage companies primarily in the United States. Although we are in the process of liquidating those securities that remain in our portfolio, we still hold some such investments and these are included as assets of our Company on a consolidated basis. As part of the Restructure, we resolved to exit such portfolio investments over an appropriate timeframe and focus our resources on our current business. Since the date of the Restructure, we have not held ourselves out as an investment company and we do not believe we are an "investment company" under the Investment Company Act of 1940. If the SEC or a court, however, were to disagree with us, we could be required to register as an investment company. This would subject us to disclosure and accounting rules geared toward investment companies, rather than operating companies, which may limit our ability to borrow money, issue options, issue multiple classes of stock and debt, and engage in transactions with affiliates, and may require us to undertake significant costs and expenses to meet the disclosure and regulatory requirements to which we would be subject as a registered investment company.

If we are classified as a passive foreign investment company for U.S. federal income tax purposes, United States holders of our Class A Ordinary Shares may be subject to adverse United States federal income tax consequences.

A non-U.S. corporation will be a passive foreign investment company ("PFIC") for U.S. federal income tax purposes, for such year, if either

- At least 75% of its gross income for such year is passive income; or
- The average percentage of our assets (determined at the end of each quarter) during such year which produce passive income or which are held for the production of passive income is at least 50%.

Passive income generally includes dividends, interests, rents and royalties (other than rents or royalties derived from the active conduct of a trade or business) and gains from the disposition of passive assets.

A separate determination must be made after the close of each taxable year as to whether a non-U.S. corporation is a PFIC for that year. For purposes of the PFIC analysis, in general, a non-U.S. corporation is deemed to own its pro rata share of the gross income and assets of any entity in which it is considered to own at least 25% of the equity by value. Based on the current and anticipated value of our assets, we believe we were a PFIC for U.S. federal income tax purposes for our taxable year ending December 31, 2018, and we may be a PFIC for U.S. federal income tax purposes for our current taxable year ending December 31, 2019.

In determining whether we are a PFIC, cash and investments are considered by the U.S. Internal Revenue Service ("IRS") to be a passive asset. During our taxable year ending December 31, 2019, we believe that the amount of restricted and unrestricted cash we had on hand and investments was greater than 50% of our total assets. The composition of our assets during the current taxable year may cause us to continue to be classified as a PFIC. The determination of whether we will be a PFIC for our current taxable year or a future year may depend in part upon how quickly we spend our liquid assets, and on the value of our goodwill and other unbooked intangibles not reflected on our balance sheet, which may depend upon the market value of our Class A Ordinary Shares from time to time. Further, while we will endeavor to use a classification methodology and valuation approach that is reasonable, the IRS may challenge our classification or valuation of our goodwill and other unbooked intangibles for purposes of determining whether we are a PFIC in the current or one or more future taxable years.

If we are a PFIC for any taxable year during which a U.S. Holder owns our Class A Ordinary Shares, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder. As discussed under "Taxation – Material U.S. Federal Income Tax Considerations for U.S. Holders – Passive Foreign Investment Company Rules", a U.S. Holder may be able to make certain tax elections that would lessen the adverse impact of PFIC status; however, in order to make such elections the U.S. holder will usually have to have been provided information about the company by us, and there is no assurance that the company will provide such information.

For a more detailed discussion of the application of the PFIC rules to us and the consequences to U.S. holders if we were determined to be a PFIC. (See "Item 10. Additional Information – E. Taxation – Material U.S. Federal Income Tax Considerations for U.S. Holders – Passive Foreign Investment Company Rules")

Political risks associated with conducting business in Hong Kong.

While we operate our business globally, our business operations are principally based in Hong Kong. Accordingly, our business operation and financial conditions will be affected by the political and legal developments in Hong Kong. During the period covered by the financial information incorporated by reference into and included in this report, we derive substantially all of our revenue from operations in Hong Kong and, specifically, from the AML Clinic in Hong Kong operating under the name of Talem Medical. Any adverse economic, social and/or political conditions, material social unrest, strike, riot, civil disturbance or disobedience, as well as significant natural disasters, may affect the market may adversely affect the business operations of the AML Clinic. Hong Kong is a special administrative region of the PRC and the basic policies of the PRC regarding Hong Kong are reflected in the Basic Law, namely, Hong Kong's constitutional document, which provides Hong Kong with a high degree of autonomy and executive, legislative and independent judicial powers, including that of final adjudication under the principle of "one country, two systems". However, there is no assurance that there will not be any changes in the economic, political and legal environment in Hong Kong in the future. Since a substantial part of our operations is based in Hong Kong, any change of such political arrangements may pose immediate threat to the stability of the economy in Hong Kong, thereby directly and adversely affecting our results of operations and financial positions.

The Hong Kong protests that begun in 2019 are ongoing protests in Hong Kong (the "Hong Kong Protests") triggered by the introduction of the Fugitive Offenders amendment bill by the Hong Kong government. If enacted, the bill would have allowed the extradition of criminal fugitives who are wanted in territories with which Hong Kong does not currently have extradition agreements, including mainland China. This led to concerns that the bill would subject Hong Kong residents and visitors to the jurisdiction and legal system of mainland China, thereby undermining the region's autonomy and people's civil liberties. Various sectors of the Hong Kong economy have been adversely affected as the protests turned increasingly violent. Most notably, the airline, retail, and real estate sectors have seen their sales decline.

Under the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, Hong Kong is exclusively in charge of its internal affairs and external relations, while the government of the PRC is responsible for its foreign affairs and defense. As a separate customs territory, Hong Kong maintains and develops relations with foreign states and regions. We cannot assure that the Hong Kong Protests will not affect Hong Kong's status as a Special Administrative Region of the People's Republic of China and thereby affecting its current relations with foreign states and regions.

Our revenue is susceptible to the ongoing Hong Kong Protests as well as any other incidents or factors which affect the stability of the social, economic and political conditions in Hong Kong. Any drastic events may adversely affect our business operations. Such adverse events may include changes in economic conditions and regulatory environment, social and/or political conditions, civil disturbance or disobedience, as well as significant natural disasters. Given the relatively small geographical size of Hong Kong, any of such incidents may have a widespread effect on our business operations, which could in turn adversely and materially affect our business, results of operations and financial condition.

We cannot assure that the Hong Kong Protests will end in the near future and that there will be no other political or social unrest in the near future or that there will not be other events that could lead to the disruption of the economic, political and social conditions in Hong Kong. If such events persist for a prolonged period of time or that the economic, political and social conditions in Hong Kong are to be disrupted, our overall business and results of operations may be adversely affected.

We are subject to the risks of doing business globally.

Because we operate our business in Hong Kong and other countries, our business is subject to risks associated with doing business globally. Accordingly, our business and financial results in the future could be adversely affected due to a variety of factors, including: changes in a specific country's or region's political and cultural climate or economic condition; unexpected changes in laws and regulatory requirements in local jurisdictions; difficulty of effective enforcement of contractual provisions in local jurisdictions; inadequate intellectual property protection in certain countries; enforcement of anti-corruption and anti-bribery laws; trade-protection measures, import or export licensing requirements and fines, penalties or suspension or revocation of export privileges; the effects of applicable local tax regimes and potentially adverse tax consequences; and significant adverse changes in local currency exchange rates.

Our results of operation may be negatively affected should the 2019-nCov virus (Coronavirus) continue to spread on a wider scale in Hong Kong.

Our business could be adversely affected by the effects of a widespread outbreak of contagious disease, including the recent outbreak of respiratory illness caused by a novel coronavirus first identified in Wuhan, Hubei Province, China. Any outbreak of contagious diseases, and other adverse public health developments, particularly in China, could have a material and adverse effect on our business operations. These could include disruptions or restrictions on our ability to travel or to distribute our products, as well as temporary closures of our facilities or the facilities of our suppliers or customers.

Risks Related to Our Corporate Structure***Our CEO has control over key decision making as a result of his control of a majority of our voting shares.***

Our Founder, CEO, and our Executive Director, Mr. Ian Huen, and his affiliates, over which he is deemed to have control and/or have substantial influence, has voting rights with respect to an aggregate of 18,376,617 ordinary shares, on an as converted basis (2,315,148 Class A Ordinary Shares and 16,061,469 Class B Ordinary Shares), representing approximately 70% of the voting power of our outstanding ordinary shares as of the date hereof. As a result, Mr. Huen has the ability to control the outcome of matters submitted to our shareholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets. In addition, Mr. Huen has the ability to control the management and affairs of our company as a result of his position as our CEO and his ability to control the election of our directors. Additionally, in the event that Mr. Huen controls our company at the time of his death, control may be transferred to a person or entity that he designates as his successor. As a board member and officer, Mr. Huen owes a fiduciary duty to our shareholders and must act in good faith in a manner he reasonably believes to be in the best interests of our shareholders. As a shareholder, even a controlling shareholder, Mr. Huen is entitled to vote his shares, and shares over which he has voting control as a result of voting agreements, in his own interests, which may not always be in the interests of our shareholders generally.

The dual class structure of our ordinary shares has the effect of concentrating voting control with our CEO, directors and their affiliates.

Each Class B Ordinary Share has ten votes per share and each Class A Ordinary Share has one vote per share. Shareholders who hold shares of Class B Ordinary Shares, including our executive officers and their affiliates who hold such shares, hold approximately 97% of the voting power of our outstanding ordinary shares as of the date of this report. Because of the ten-to-one voting ratio between our Class B and Class A Ordinary Shares, the holders of our Class B Ordinary Shares collectively will continue to control a majority of the combined voting power of our ordinary share and therefore be able to control all matters submitted to our shareholders for approval so long as the shares of Class B Ordinary Shares represent at least 9.1% of all outstanding shares of our Class A Ordinary Shares and Class B Ordinary Shares. This concentrated control will limit your ability to influence corporate matters for the foreseeable future.

Future transfers by holders of Class B Ordinary Shares will generally result in those shares converting to Class A Ordinary Shares, subject to limited exceptions, such as certain transfers effected for estate planning purposes. The conversion of Class B Ordinary Shares to Class A Ordinary Shares will have the effect, over time, of increasing the relative voting power of those holders of Class B Ordinary Shares who retain their shares in the long term. If, for example, Mr. Huen retains a significant portion of his holdings of Class B Ordinary Share for an extended period of time, he could, in the future, continue to control a majority of the combined voting power of our Class A Ordinary Shares and Class B Ordinary Shares.

As a “controlled company” under the rules of the NASDAQ Global Market, we may choose to exempt our company from certain corporate governance requirements that could have an adverse effect on our public shareholders.

Our directors and officers beneficially own a majority of the voting power of our outstanding Class A Ordinary Shares. Under the Rule 4350(c) of the NASDAQ Global Market, a company of which more than 50% of the voting power is held by an individual, group or another company is a “controlled company” and may elect *not* to comply with certain corporate governance requirements, including the requirement that a majority of our directors be independent, as defined in the NASDAQ Global Market Rules, and the requirement that our compensation and nominating and corporate governance committees consist entirely of independent directors. Although we do not intend to rely on the “controlled company” exemption under the Nasdaq listing rules, we could elect to rely on this exemption in the future. If we elect to rely on the “controlled company” exemption, a majority of the members of our board of directors might not be independent directors and our nominating and corporate governance and compensation committees might not consist entirely of independent directors. Accordingly, during any time while we remain a controlled company relying on the exemption and during any transition period following a time when we are no longer a controlled company, you would not have the same protections afforded to shareholders of companies that are subject to all of the NASDAQ Global Market corporate governance requirements. Our status as a controlled company could cause our Class A Ordinary Share to look less attractive to certain investors or otherwise harm our trading price.

Risks Related to our Securities

Shares eligible for future sale may adversely affect the market price of our Class A Ordinary Shares if the shares are successfully listed on NASDAQ or other stock markets, as the future sale of a substantial amount of outstanding Class A Ordinary Shares in the public marketplace could reduce the price of our Class A Ordinary Shares.

The market price of our Class A Ordinary Shares could decline as a result of sales of substantial amounts of our Class A Ordinary Shares in the public market, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of our Class A Ordinary Shares. Most of the Class A Ordinary Shares are freely transferable without restriction or further registration under the Securities Act. The remaining Class A Ordinary Shares will be “restricted securities” as defined in Rule 144. These Class A Ordinary Shares may be sold without registration under the Securities Act to the extent permitted by Rule 144 or other exemptions under the Securities Act.

A sale or perceived sale of a substantial number of our Ordinary Shares may cause the price of our Class A Ordinary Shares to decline.

If our shareholders sell substantial amounts of our Class A Ordinary Shares in the public market, the market price of our Class A Ordinary Shares could fall. Moreover, the perceived risk of this potential dilution could cause shareholders to attempt to sell their shares and investors to short our Class A Ordinary Shares. These sales also may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

Issuances by us of additional securities, whether in traditional or token format, could affect ownership and voting rights over us. In addition, the issuance of preferred shares, or options or warrants to purchase those preferred shares, could negatively impact the value of the Class A ordinary shares as the result of preferential dividend rights, conversion rights, redemption rights and liquidation provisions granted to the stockholders of such preferred shares.

From time to time, we may issue in public or private sales additional securities to third party investors. Such securities may provide holders with ownership and voting rights that could provide the holders thereof with substantial influence over our business. Any preferred shares that may be issued shall have such rights, preferences, privileges and restrictions as may be designated from time-to-time by our board, including preferential dividend rights, voting rights, conversion rights, redemption rights and liquidation provisions. There cannot be any assurance that we will not issue preferred securities with rights and preferences that are more beneficial than those provided to our Ordinary Shares.

We have not paid dividends in the past and do not expect to pay dividends in the future, and any return on investment may be limited to the value of our shares.

We have never paid any cash dividends on our Class A Ordinary Shares and do not anticipate paying any cash dividends on our Class A Ordinary Shares in the foreseeable future, and any return on investment may be limited to the value of our Class A Ordinary Shares. We plan to retain any future earnings to finance growth.

Our dividend policy is subject to the discretion of our Board of Directors and will depend on, among other things, our earnings, financial condition, capital requirements and other factors. There is no assurance that our Board of Directors will declare dividends even if we are profitable. Under Cayman Islands law, dividends may be declared and paid only out of funds legally available therefor, namely out of either profit or our share premium account, and provided further that a dividend may not be paid if this would result in our Company being unable to pay its debts as they fall due in the ordinary course of business and the realizable value of assets of our Company will not be less than the sum of our total liabilities, other than deferred taxes as shown on our books of account, and our capital.

Our Class B Ordinary Shares have stronger voting power than our Class A Ordinary Shares and certain existing shareholders have substantial influence over our Company and their interests may not be aligned with the interests of our other shareholders.

We have a dual-class voting structure consisting of Class A Ordinary Shares and Class B Ordinary Shares. Under this structure, holders of Class A Ordinary Shares are entitled to one vote per share, and holders of Class B Ordinary Shares are entitled to ten votes per share, which can cause the holders of Class B Ordinary Shares to have an unbalanced, higher concentration of voting power. Our management team as a group beneficially owns over 18 million Class B Ordinary Shares representing 80% voting power. As a result, until such time as their collective voting power is below 50%, our management team as a group of controlling shareholders have substantial influence over our business, including decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. They may take actions that are not in the best interests of us or our other shareholders. These corporate actions may be taken even if they are opposed by our other shareholders. Further, concentration of ownership of our Class B Ordinary Shares may discourage, prevent or delay the consummation of change of control transactions that shareholders may consider favorable, including transactions in which shareholders might otherwise receive a premium for their shares. Future issuances of Class B Ordinary Shares may also be dilutive to the holders of Class A Ordinary Shares. As a result, the market price of our Class A Ordinary Shares could be adversely affected.

Shareholders who hold shares of Class B Ordinary Shares, including our executive officers and their affiliates, hold approximately 97% of the voting power of our outstanding ordinary shares. Because of the ten-to-one voting ratio between our Class B and Class A Ordinary Shares, the holders of our Class B Ordinary Shares will collectively continue to control a majority of the combined voting power of our Ordinary Shares and therefore be able to control all matters submitted to our shareholders for approval, so long as the Class B Ordinary Shares represent at least 9.1% of all outstanding shares of our Ordinary Shares.

Raising additional capital may cause dilution to our shareholders, restrict our operations or require us to relinquish rights to our technology or drug and device candidates.

We may seek additional funding through a combination of equity offerings, debt financings, collaborations, licensing arrangements, strategic alliances and marketing or distribution arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a holder of our Class A Ordinary Shares. The incurrence of additional indebtedness or the issuance of certain equity securities could result in increased fixed payment obligations, and could also result in certain additional restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license IP rights and other operating restrictions that could adversely impact our ability to conduct our business. In addition, issuance of additional equity securities, or the possibility of such issuance, may cause the market price of our Class A Ordinary Shares to decline. In the event that we enter into collaborations or licensing arrangements to raise capital, we may be required to accept unfavorable terms, including relinquishing or licensing to another party on unfavorable terms our rights to technology or drug and device candidates that we otherwise would seek to develop or commercialize ourselves or potentially reserve for future potential arrangements when we might be able to achieve more favorable terms.

Since we are a Cayman Islands exempted company, the rights of our shareholders may be more limited than those of shareholders of a company organized in the United States.

Our corporate affairs are governed by our Second Amended and Restated Memorandum and Articles of Association (as may be amended from time to time) (“Memorandum and Articles”), the Companies Law (2018 Revision) of the Cayman Islands (the “Companies Law”) and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary responsibilities of our directors are to a large extent governed by the common law of the Cayman Islands. This common law is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. Under the laws of some jurisdictions in the United States, majority and controlling shareholders generally have certain fiduciary responsibilities to the minority shareholders. Shareholder action must be taken in good faith, and actions by controlling shareholders which are obviously unreasonable may be declared null and void. Cayman Islands law protecting the interests of minority shareholders may not be as protective in all circumstances as the law protecting minority shareholders in some U.S. jurisdictions. In addition, the circumstances in which a shareholder of a Cayman Islands company may sue the company derivatively, and the procedures and defenses that may be available to the company, may result in the rights of shareholders of a Cayman Islands company being more limited than those of shareholders of a company organized in the United States. Accordingly, shareholders may have fewer alternatives available to them if they believe that corporate wrongdoing has occurred. The Cayman Islands courts are also unlikely to recognize or enforce judgments from U.S. courts based on certain liability provisions of U.S. securities laws that are penal in nature. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will generally recognize and enforce non-penal judgment of a foreign court of competent jurisdiction for a liquidated sum without retrial on its merits which is not obtained in a manner contrary to public policy in the Cayman Islands and in respect of which there are no concurrent proceedings in the Cayman Islands. This means, even if shareholders were to sue us successfully, they may not be able to recover anything to make up for the losses suffered.

Furthermore, our directors have the power to take certain actions without shareholder approval which would require shareholder approval under the laws of most U.S. jurisdictions. For example, the directors of a Cayman Islands company, without shareholder approval, may implement a sale of any assets, property, part of the business, or securities of the Company.

While Cayman Islands law allows a dissenting shareholder to express the shareholder's view that a court sanctioned reorganization of a Cayman Islands company would not provide fair value for the shareholder's shares, Cayman Islands statutory law does not specifically provide for shareholder appraisal rights on a merger or consolidation of a company. This may make it more difficult for you to assess the value of any consideration you may receive in a merger or consolidation or to require that the acquirer gives you additional consideration if you believe the consideration offered is insufficient. However, Cayman Islands' statutory law does provide a mechanism for a dissenting shareholder in a merger or consolidation to apply to the Grand Court for a determination of the fair value of the dissenter's shares, if it is not possible for the Company and the dissenter to agree a fair price within the time limits prescribed.

Shareholders of Cayman Islands exempted companies, such as our Company, have no general rights under Cayman Islands' law to inspect corporate records and accounts or to obtain copies of lists of shareholders. Our directors have discretion under our Memorandum and Articles to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

Lastly, under the law of the Cayman Islands, there is little statutory law for the protection of minority shareholders. The principal protection under statutory law is that shareholders may bring an action to enforce the constituent documents of the corporation, our Memorandum and Articles. Shareholders are entitled to have the affairs of the company conducted in accordance with the general law and the memorandum and articles of association.

There are common law rights for the protection of shareholders that may be invoked, largely dependent on English company law, since the common law of the Cayman Islands for business companies is limited. Under the general rule pursuant to English company law known as the rule in Foss v. Harbottle, a court will generally refuse to interfere with the management of a company at the insistence of a minority of its shareholders who express dissatisfaction with the conduct of the company's affairs by the majority or the board of directors. However, every shareholder is entitled to have the affairs of the company conducted properly according to law and the constituent documents of the company. As such, if those who control the company have persistently disregarded the requirements of company law or the provisions of the company's memorandum and articles of association, then the courts will grant relief. Generally, the areas in which the courts will intervene are the following: (1) an act complained of which is outside the scope of the authorized business or is illegal or not capable of ratification by the majority; (2) acts that constitute fraud on the minority where the wrongdoers control the company; (3) acts that infringe on the personal rights of the shareholders, such as the right to vote; and (4) where the company has not complied with provisions requiring approval of a special or extraordinary majority of shareholders, which are more limited than the rights afforded minority shareholders under the laws of many states in the United States subject to limited exceptions, under Cayman Islands Law a minority shareholder may not bring a derivative action against directors. Our Cayman Islands' counsel has advised us that they are aware of one recent as yet unreported derivative action having been brought in a Cayman Islands' court. Class actions are not recognized in the Cayman Islands, but groups of shareholders with identical interests may bring representative proceedings, which are similar.

As a result, you may be limited in your ability to protect your interests if you are harmed in a manner that would otherwise enable you to sue in a United States federal court. In addition, shareholders of Cayman Islands companies may not have standing to initiate a shareholder derivative action in U.S. federal courts.

As a result of all of the above, shareholders of our Company may have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would have as shareholders of a public U.S. company.

You may face difficulties in protecting your interests, and your ability to protect your rights through the U.S. federal courts may be limited because we are incorporated under Cayman Islands law, we currently conduct substantially all of our operations outside the United States and some of our directors and executive officers reside outside the United States.

We are incorporated in the Cayman Islands and currently conduct substantially all of our operations outside the United States through our subsidiaries. Some of our directors and executive officers reside outside the United States and a substantial portion of their assets are located outside of the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the Cayman Islands or in Hong Kong, in the event that you believe that your rights have been infringed under the securities laws of the United States or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and Hong Kong may render you unable to enforce a judgment against our assets or the assets of our directors and officers. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States or Hong Kong, although the courts of the Cayman Islands will generally recognize and enforce a non-penal judgment of a foreign court of competent jurisdiction without retrial on the merits if such judgment is final, for a liquidated sum, not in the nature of taxes, a fine or penalty, is not inconsistent with a Cayman Islands' judgment in respect of the same matters, and was not obtained in a manner which is contrary to public policy. In addition, a Cayman Islands court may stay proceedings if concurrent proceedings are being brought elsewhere.

As a foreign private issuer, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the NASDAQ Global Market corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with corporate governance listing standards.

As a foreign private issuer, we are permitted to take advantage of certain provisions in the NASDAQ Global Market listing rules that allow us to follow Cayman Islands law for certain governance matters. Certain corporate governance practices in the Cayman Islands may differ significantly from corporate governance listing standards as, except for general fiduciary duties and duties of care, Cayman Islands law has no corporate governance regime which prescribes specific corporate governance standards. We may follow Cayman Islands corporate governance practices in lieu of the corporate governance requirements of the Nasdaq Global Market in respect of the following. For instance, Cayman law does not require that we obtain shareholder approval to issue 20% or more of our outstanding Ordinary Shares in a private offering. Therefore, our shareholders may be afforded less protection than they otherwise would have under corporate governance listing standards applicable to U.S. domestic issuers.

We are an emerging growth company within the meaning of the Securities Act and will take advantage of certain reduced reporting requirements.

We are an "emerging growth company," as defined in the JOBS Act and take advantage of certain exemptions from various requirements applicable to other public companies that are not emerging growth companies including, most significantly, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act for so long as we are an emerging growth company. As a result, if we elect not to comply with such auditor attestation requirements, our investors may not have access to certain information they may deem important.

The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. The Company has elected to use the extended transition period for complying with new or revised accounting standard under Section 102(b)(2) of the Jobs Act, that allows the Company to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies.

Risks Related to the SMPT tokens

There is no assurance that purchasers of the SMPT tokens will receive a return on their investment.

On April 24, 2019, the SMPT token was announced to be launched. The SMPT tokens are issued by Smart Pharmaceutical Limited Partnership ("SPLP"), a limited partnership registered in Seychelles, which is managed by SMTPH as its sole general partner. SMTPH is a wholly-owned subsidiary of Aptorum Therapeutics Limited. Aptorum Group Limited is not involved with the offer and sale of the SMPT token in any way, other than the potential indirect benefit it will receive as a result of its subsidiary, Smart Pharma, from drug candidates developed by the Smart-ACTTM platform. Each Token will entitle its holder (each, a "Tokenholder") to receive certain sales-based royalties, sublicensing income or additional cash flow generated by drug candidates developed by the Smart-ACTTM platform (the "Token Distribution").

As identified in the aforementioned risk factors, a pharmaceutical company's ability to generate revenue and achieve profitability is dependent on its ability to complete the development of drug candidates and any future drug candidates one develops in its portfolio, obtain necessary regulatory approvals, and have our drugs products under development manufactured and successfully marketed, of which there can be no guarantee. Furthermore, the research methodology used may be unsuccessful in identifying potential drug candidates, or those drug candidates identified may have harmful side effects or other undesirable characteristics that make them unmarketable or unlikely to receive regulatory approval (See "Item 3. Key Information—D. Risk Factors – Risks Related to the Preclinical and Clinical Development of Our Drug Candidates - We currently do not generate revenue from product sales and may never become profitable; unless we can raise more capital through additional financings, of which there can be no guarantee, our principal source of revenue will be from AML Clinic, which may not be substantial" and "We may not be successful in our efforts to identify or discover additional drug candidates. Due to our limited resources and access to capital, we must continue to the prioritize development of certain drug candidates; such decisions may prove to be wrong and may adversely affect our business").

Therefore, we cannot guarantee that any drug candidates currently and subsequently developed by SMTPH using the Smart-ACTTM platform will generate any revenue that would derive any sales-based royalties, sublicensing income or additional cash flow for distribution to Tokenholders.

Accordingly, there is no assurance that purchasers of SMPT tokens will realize any return on their investments or that their entire investments will not be lost.

SMPT Tokenholders' security interest in the intellectual property rights may affect our shareholder's interest in the Company.

SPLP acts as the intellectual property holding company of Smart Pharma, and holds all title, rights and ownership interest of the intellectual property rights developed by Smart-ACTTM ("Project IP"). The SMPT tokens are secured by way of a floating charge against the Project IP to guarantee the distribution of accrued sales-based royalties, sublicensing income or additional cash flow generated by drug candidates developed by the Smart-ACTTM platform.

Therefore, regardless of the number of the SMPT tokens sold and the amount of proceeds raised from the token sales, Tokenholders will only be eligible to receive a Token Distribution if any sales-based royalties, sublicensing income or additional cash flow is generated by drug candidates developed by the Smart-ACTTM platform, as and when SPLP declares the distribution.

Because the Token Distribution is secured by a security interest in such intellectual property rights, if and when SPLP defaults in its distribution obligations to the Tokenholders, or in the event of liquidation, dissolution or winding up of SPLP, the floating charge may crystallize into a fixed charge over the charged assets (i.e., the Project IP owned by SPLP), while a receiver may be appointed by the Tokenholders to sell off the Project IP. If this were to occur, the disposal of the Project IP by an appointed receiver may trigger a breach of any commercialization agreements between Smart Pharma and third parties with respect to the repurposed drug project, which may in turn affect our business, revenue and reputation.

The distributions to SMPT Tokenholders are not correlated with the number of SMPT tokens sold or net proceeds raised through the SMPT token sales.

SMTPH intends to use all of the proceeds raised from the SMPT token sales towards the development and operation of the Smart-ACTTM platform. If the issuance of the SMPT tokens does not result in substantial proceeds, it could have a material adverse effect on SMTPH's ability to fund these objectives and carry out its related business plans, its ability to develop the Smart-ACTTM platform may be limited.

Aptorum Group anticipates that the net proceeds from the sales of the SMPT tokens will not be sufficient to fully fund Smart Pharma's current and future operations until it becomes self-sustaining. Smart Pharma's current funding needs include funding for validation and assessment of candidates, operation and improvement of the platform, legal/professional services and exchanges-listing.

Therefore, Smart Pharma will likely require funding from Aptorum Group or other sources to subsidize and support its operations. The presence and level of funding support from Aptorum Group or other sources will not affect the aggregate distribution entitled by the Tokenholders, as the aggregate distribution is dependent on the ability for Smart-ACTTM to develop drug candidates that can generate sales-based royalties, sublicensing income or additional cash flow and the extent of commercial success of such candidate.

Therefore, the distributions to SMPT Tokenholders would not necessarily be correlated with the number of SMPT tokens sold or the net proceeds raised through the SMPT token sales. The dollar value of the aggregate distributions will not be affected by proceeds from the SMPT token sales, regardless of whether the proceeds greatly exceed or are significantly lower than the actual costs for funding Smart Pharma's current and future operations.

Item 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Aptorum was incorporated under the laws of the Cayman Islands on September 13, 2010. Our share capital is \$100,000,000.00 divided into 60,000,000 Class A Ordinary Shares with a nominal or par value of \$1.00 each and 40,000,000 Class B Ordinary Shares with a nominal or par value of \$1.00 each.

APTUS CAPITAL LIMITED, which has since been renamed to AENEAS CAPITAL LIMITED and which we refer to herein as Aeneas, was always under the direct ownership of Jurchen and not under the ownership chain of Aptorum Group. However, Aptus Asia Financial Holdings Limited ("AAFH"), which has since been renamed to Aeneas Group Limited, was transferred out of the Aptorum Group on November 10, 2017 to be held directly by Jurchen Investment Corporation and that subsequently, APTUS CAPITAL LIMITED was then transferred to be under AAFH.

On May 4, 2017, Mr. Huen transferred all of the ordinary shares in the Company he owned (in the amount of 22,307,596) to Jurchen, a company incorporated in the British Virgin Islands and wholly-owned by Mr. Huen. On October 13, 2017, as part of the Conversions (as defined below) the ordinary shares held by Jurchen were redesignated as 2,230,760 Class A Ordinary Shares and 20,076,836 Class B Ordinary Shares.

On February 21 and March 1, 2017, the Company's board of directors and shareholders resolved to restructure the Company from an investment fund with management shares and non-voting participating redeemable preference shares to a holding company with operating subsidiaries, respectively (the "Restructuring Plan").

According to the Restructuring Plan, the 256,571.12 issued participating shares with par value of \$0.01 ("Participating Shares") were redeemed and 4,743,418.88 unissued Participating Shares were cancelled; following such redemption and cancellation, we no longer have any Participating Shares authorized or issued. Additionally, the Company authorized a class of securities consisting of 100,000,000 ordinary shares, par value \$1.00 per share ("Ordinary Shares") and issued 25,657,110 Ordinary Shares to our original investors.

During the period March 1, 2017 through October 13, 2017, an aggregate of 2,207,025 Ordinary Shares were issued at a price of approximately \$3.90 per share in a private placement we described as a "Series A" offering. Each investor of the Series A offering, in addition to a subscription agreement, signed a shareholder agreement, which set forth the basic governance terms of the Company, as well as our capital structure. The shareholders agreement was terminated in October 2017.

On October 13, 2017, ordinary resolutions were passed at an extraordinary general meeting of the Company approving (the "Conversions"): (i) converting 72,135,865 of authorized but unissued Ordinary Shares into 54,573,620 authorized but unissued Class A ordinary shares, par value of \$1.00 per share ("Class A Ordinary Shares") and 17,562,245 authorized but unissued Class B ordinary shares, par value of \$1.00 per share ("Class B Ordinary Shares"), respectively; (ii) converting 24,930,839 Ordinary Shares held by three shareholders into an aggregate of 2,493,085 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares; and (iii) converting 2,933,296 Ordinary Shares held by 24 shareholders into an aggregate 2,933,296 Class A Ordinary Shares. Following these issuances, we had 27 shareholders of record.

On October 19, 2017, we changed our name from APTUS Holdings Limited to our current name, Aptorum Group Limited.

On March 23, 2018, Jurchen transferred 446,152 Class A Ordinary Shares and 4,015,367 Class B Ordinary Shares to CGY Investments Limited, a company incorporated in Hong Kong and which we deem Mr. Darren Lui controls and/or of which he has substantial influence on the disposition rights and voting rights of such shares. Following this transfer, Jurchen owns approximately 33% and 72% of our Class A Ordinary Shares and Class B Ordinary Shares, respectively.

On December 17, 2018, the Company consummated its IPO of 761,419 Class A Ordinary Shares. The Registration Statement was declared effective by the U.S. Securities and Exchange Commission on December 3, 2018 (the "Effective Date"). The shares were sold at a price of \$15.80 per share, generating gross proceeds to the Company of approximately \$12,030,420. Immediately following the consummation of the IPO and automatic conversion of the Notes and Bonds, there were an aggregate of 6,537,269 Class A Ordinary Shares issued and outstanding.

On February 28, 2020, the Company consummated a Registered Direct Offering of 1,351,350 Class A Ordinary Shares and warrants to purchase up to 1,351,350 Class A Ordinary Shares. The shares were sold at a price of \$7.40 per share, generating gross proceeds to the Company of approximately \$10 million. The warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. Immediately following the consummation of the Registered Direct Offering, there were an aggregate of 7,948,712 Class A Ordinary Shares issued and outstanding.

Over the past three years, we have invested approximately \$9.9 million towards our principal capital expenditures, which include laboratory equipment, premises, leasehold improvements, and medical and other equipment.

<p>Apharim Group Limited (Jamaica)</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p>	<p>Apharim Therapeutics Limited (Jamaica)</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p>	<p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p>	<p>Apharim Investments Holding Limited (Jamaica)</p> <p>Apharim Investments Holding Limited (Jamaica)</p> <p>Aphar Therapeutics (Hong Kong) Limited (Hong Kong)</p> <p>Apharim International Limited (United Kingdom)</p> <p>Apharim Pharmaceuticals of Development Limited (Jamaica)</p> <p>Smart Pharmaceutical Development Limited (Jamaica)</p> <p>Valent Incorporated Limited (Jamaica)</p> <p>Apharim Life Sciences Limited (Jamaica)</p> <p>Scipe Life Sciences Limited (Jamaica)</p> <p>Class Life Sciences Limited (Jamaica)</p> <p>Sigarte Life Sciences Limited (Jamaica)</p> <p>Adicore Life Sciences Limited (Jamaica)</p> <p>Landlife Life Sciences Limited (Jamaica)</p> <p>MAFFS Limited (Jamaica)</p>	<p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p>	<p>Apharim Investments Holding Pte. Ltd. (Singapore)</p> <p>Apharim Investments Holding Pte. Ltd. (Singapore)</p> <p>Aphar Therapeutics (Hong Kong) Limited (Hong Kong)</p> <p>Apharim International Limited (United Kingdom)</p> <p>Apharim Pharmaceuticals of Development Limited (Jamaica)</p> <p>Smart Pharmaceutical Development Limited (Jamaica)</p> <p>Valent Incorporated (Hong Kong) Limited (Hong Kong)</p> <p>Valent Incorporated (Hong Kong) Limited (Hong Kong)</p> <p>Nathus Life Sciences (Hong Kong) Limited (Hong Kong)</p> <p>Scipe Life Sciences (Hong Kong) Limited (Hong Kong)</p> <p>Class Life Sciences (Hong Kong) Limited (Hong Kong)</p> <p>Sigarte Life Sciences (Hong Kong) Limited (Hong Kong)</p> <p>Adicore Life Sciences (Hong Kong) Limited (Hong Kong)</p> <p>Landlife Life Sciences (Hong Kong) Limited (Hong Kong)</p> <p>Smart Pharmaceutical Research Limited (Singapore)</p> <p>Smart Pharmaceutical Development Pte. Ltd. (Singapore)</p> <p>Smart Pharmaceutical Limited Partnership (Singapore)</p>
--	---	---	--	---	--

Emerging Growth Company Status

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act (the “JOBS Act”), and we are eligible to take advantage of certain exemptions from various reporting and financial disclosure requirements that are applicable to other public companies, that are not emerging growth companies, including, but not limited to, (1) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (2) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and (3) exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We intend to take advantage of these exemptions.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, for complying with new or revised accounting standards. As a result, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies.

We could remain an emerging growth company for up to five years, or until the earliest of (1) the last day of the first fiscal year in which our annual gross revenues exceed \$1.07 billion, (2) the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our Ordinary Shares that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter and we have been publicly reporting for at least 12 months, or (3) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period.

Foreign Private Issuer Status

We are a foreign private issuer within the meaning of the rules under the Exchange. As such, we are exempt from certain provisions applicable to United States domestic public companies. For example:

- we are not required to provide as many Exchange Act reports, or as frequently, as a domestic public company;
- for interim reporting, we are permitted to comply solely with our home country requirements, which are less rigorous than the rules that apply to domestic public companies;
- we are not required to provide the same level of disclosure on certain issues, such as executive compensation;
- we are exempt from provisions of Regulation FD aimed at preventing issuers from making selective disclosures of material information;
- we are not required to comply with the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act; and
- we are not required to comply with Section 16 of the Exchange Act requiring insiders to file public reports of their share ownership and trading activities and establishing insider liability for profits realized from any “short-swing” trading transaction.

B. Business Overview**Overview**

We are a pharmaceutical company dedicated to developing and commercializing a broad range of therapeutic and diagnostic technologies to tackle unmet medical needs. We have obtained exclusive licenses for our technologies. In addition, we are also developing certain proprietary technologies as product candidates. We are pursuing therapeutic and diagnostic projects (including projects seeking to use extracts or derivatives from natural substances to treat diseases) in neurology, infectious diseases, gastroenterology, oncology and other disease areas. We also have projects focused on surgical robotics. (See “Item 4. Information on the Company – B. Business Overview – Lead Projects, Dietary Supplement and Other Projects under Development – Lead Projects”) Also, we opened a medical clinic, AML Clinic, in June 2018.

Although none of our drug or device candidates has yet been approved for testing in humans, our goal is to develop a broad range of early stage novel therapeutics and diagnostics across a wide range of disease/therapeutic areas. Key components of our strategy for achieving this goal include: (for details of our strategy, See “Item 4. Information on the Company – B. Business Overview – Our Strategy”)

- Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas;
- Selectively expanding our portfolio with potential products that may be able to attain orphan drug designation and/or satisfy current unmet medical needs;
- Collaborating with leading academic institutions and CROs;
- Expanding our in-house pharmaceutical development center;
- Leveraging our management’s expertise, experience and commercial networks;
- Strategically developing opportunities in Hong Kong to promote access to the PRC market; and
- Obtaining and leveraging government grants to fund project development.

We have devoted a portion of the proceeds from our IPO, to two therapeutic projects (“Lead Projects”). The drug candidates being advanced as the Lead Projects are ALS-4 and SACT-1, described in further detail below. If the results of the remaining preclinical studies of these drug candidates are positive, we expect to be able to submit by the second half of 2020, subject to regulatory review, an Investigational New Drug Application (“IND”) for at least one of these candidates to the U.S. Food and Drug Administration (“FDA”) or an equivalent application to the regulatory authorities in one or more other jurisdictions such as the China Food and Drug Administration (“NMPA”) and/or the European Medicines Agency (“EMA”). Acceptance of these applications by the relevant regulatory authority would enable the Company to begin testing that drug candidate in humans in that jurisdiction. Our ability to obtain any approval of such applications is entirely dependent upon the results of our preclinical studies, none of which have yet been completed.

Our current business consists of “therapeutics” and “non-therapeutics” segments. However, our focus is on the therapeutics segments. Because of the risks, costs and extended development time required for successful drug development, we have determined to pursue projects within our non-therapeutics segments, such as AML Clinic, to provide some interim revenue and medical robots that may be brought to market and generate revenue more quickly.

Therapeutics Segment. In our therapeutics segment (“Aptorum Therapeutics Group”), we are currently seeking to develop various drug molecules (including projects seeking to use extracts or derivatives from natural substances to treat diseases) and certain technologies for the treatment (“therapeutics”) and diagnosis (“diagnostics”) of human disease conditions in neurology, infectious diseases, gastroenterology, oncology and other disease areas. In addition, we are seeking to identify additional prospects which may qualify for potential orphan drug designation (e.g., rare types of cancer) or which address other current unmet medical needs. Aptorum Therapeutics Group is operated through Aptorum’s wholly-owned subsidiary, Aptorum Therapeutics Limited, a Cayman Islands exempted company with limited liability, whose principal place of business is in Hong Kong and its indirect subsidiary companies (who we sometimes refer to herein as project companies), whose principal places of business are also in Hong Kong.

Non-Therapeutics Segment. The non-therapeutics segment ("Aptorum Non-Therapeutics Group") encompasses three businesses: (i) the development of surgical robotics and medical devices, (ii) AML Clinic and (iii) sales of dietary supplement. The development of surgical robotics and medical devices business is operated through Signate Life Sciences Limited, a subsidiary of Aptorum Therapeutics Limited. The outpatient clinic is operated through our subsidiary, Aptorum Medical Limited. Effective as of March 2018, we leased office space in Central, Hong Kong as the home to AML Clinic. AML Clinic commenced operations under the name of Talem Medical in June 2018. The estimated general administrative expenses and other operating expenses of the AML Clinic is expected to be no more than USD120,000 per month. The clinic is expected to reach operating profit in 18 months from the clinic reaching its full operating capacity upon (i) the successful recruitment of a minimum of six full time physicians (AML Clinic currently has one full time physician and six part time physicians) and (ii) establishing steady patients flow via brand development. (See "Item 4. Information on the Company – B. Business Overview – Lead Projects, Dietary Supplement and Other Projects under Development – Other Projects under Development – Aptorum Medical Limited - AML Clinic") The sale of dietary supplements is operated through Nativus Life Sciences Limited ("Nativus"), a subsidiary of Aptorum Therapeutics Limited. As part of the commercialization, the Group, through Nativus, entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products. Through Multipak, the Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group's dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell™.

The Company has already obtained opportunities resulting in our existing licensing agreements from various contractual relationships that we have entered into, including service/consulting agreements with some of the world's leading specialists and clinicians in our areas of interest, with academic institutions and organizations, and with CROs. We anticipate that these relationships will generate additional licensing opportunities in the future. In addition, we have established and are continuing to expand our in-house research facilities (collectively, the "R&D Center") to develop some of our drug and device candidates internally and to collaborate with third-party researchers.

Prior to March 2017, the Company had pursued passive healthcare related investments in early stage companies primarily in the United States. However, we have since ceased pursuing further passive investment operations and intend to exit all such portfolio investments over an appropriate timeframe to focus resources on our current business.

On April 24, 2019, the Company signed an agreement with Aeneas Capital Limited, and A*ccelerate Technologies Pte. Ltd, the enterprise office of the Agency for Science, Technology and Research ("A*STAR"), (collectively, the "Parties") to co-create local deep tech startups. This agreement, which is part of A*ccelerate's venture co-creation ("VCC") initiative, commits all parties to the co-creation of local startups in the healthcare and life science sector (the "Master Collaboration Agreement"). The goal is to create a total of up to 20 deep tech ventures in Singapore will be created by this partnership over the next 5 years. A*STAR shall contribute a total of up to \$30,000,000 to any suitable startups, at their discretion. The Company and Aeneas Capital Limited will contribute a total of up to \$30,000,000 to any suitable startups at their discretion with a focus on (i) securing pilot customers; (ii) incorporation of the startups as companies and financial commitments of such customers; (iii) capital raising and capital market plans; (iv) recruiting and building of the startup teams; (v) equipment and infrastructure; and (vi) licensing of IP to the startups under the Technology License Agreements. The Master Collaboration Agreement shall continue for a period of 5 years, unless otherwise terminated or extended by the Parties.

Our Strategy

Although we plan to continue the development and improvement of a broad range of novel therapeutics and diagnostics across a wide range of disease/therapeutic areas, over the next 24-36 months we plan to concentrate on development of our Lead Projects, while also allocating some resources to develop SLS-1, maintaining our AML Clinic and sale of dietary supplement.

We believe that execution of this strategy will position the Company to catalyze the development and improvement of a broad range of early-staged novel therapeutics and diagnostics across a wide range of disease/therapeutic areas. Failure to achieve positive results in at least one of the programs for a Lead Project could have a material adverse effect on the Company's prospects and business.

To achieve this goal, we are implementing the following strategies:

- **Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas.** We are currently developing drug and device candidates in several disease/therapeutic areas. We believe that by diversifying our research efforts, it would increase the likelihood that at least one of our projects will achieve clinical success and therefore add value to the Company. As of date of this annual report, we have obtained 12 exclusively licensed technologies across the areas of neurology, infectious diseases, gastroenterology, oncology, surgical robotics and natural health. Our initial focus will be on developing our Lead Projects, but intend to continue developing our other current projects and seeking new licensing opportunities where we determine that the market potential justifies the additional commitment of our limited resources.

- **Selectively expanding our portfolio with potential products that may be able to attain orphan drug designation and/or satisfy current unmet medical needs.** We have selected innovations for development which we believe are of superior scientific quality, whilst taking into account the potential market size and demand for same, for example, taking into consideration whether the relevant product can satisfy significant unmet medical needs. In particular, Aptorum Group Limited has established a Scientific Advisory Board, which helped us to select our current projects and which we expect will provide input from a scientific perspective towards any future opportunities for acquiring or licensing life science innovations. We intend to continue expanding our line of projects under development, and subject to our financial and other resource limitations, exploring acquisitions or licenses of additional products which may be able to attain orphan drug designations (e.g., rare types of cancer) or satisfy significant unmet medical needs and that show strong preclinical and/or early clinical data to provide promising opportunities for clinical and commercial success.
- **Collaborating with leading academic institutions and CROs.** In building and developing our product portfolio, we believe that accessing external innovation, expertise and technology through collaboration with leading academic institutions and CROs is a vital and cost-efficient strategy. We have established strong relationships with leading academic institutions around the world and expect to continue to strengthen our collaborations by, for example, seeking to provide their affiliated Principal Investigators resources through sponsorship to conduct further research in specialty fields of interest and association with personnel connected to our current project companies, in exchange for obtaining for the Company the first right to negotiate for an exclusive license to any resulting innovations. In addition, we have entered and will continue to actively source arrangements with pharmaceutical companies, in most cases in roles as contract research organizations, to streamline the development of our projects. This may include outsourcing part of the preclinical, clinical studies and clinical supplies manufacturing to externally accredited cGMP and cGCP standard contract research organizations or laboratories in order to attain the required studies for submission to the regulatory authorities as part of the clinical development plan. (See "Item 4. Information on the Company – B. Business Overview – Arrangements with Other Parties")

- **Expanding our in-house pharmaceutical development center.** We believe collaborations between the R&D Center operated by APD and the scientists engaged in work for our project companies will enhance clinical and commercial potential of the projects. In addition, APD will assist the project companies by engaging external pharmaceutical companies and/or contract research organizations to outsource any part of the preclinical or clinical development work that cannot be performed by the R&D Center in order to obtain the resources necessary for our development process.
- **Leveraging our management's expertise, experience and commercial networks.** We believe the combination of our management's expertise and experience, with their academic and commercial networks make us an effective platform for advancing healthcare innovations towards clinical studies and commercialization in key global markets. We have assembled a management team with global experience and an extensive record of accomplishments in medical research, consulting and financing, and identification and acquisition of pharmaceutical and biopharmaceutical drug and device candidates. Our Head of Research and Development also has extensive experiences in drug development. We also employ key management personnel with banking and financial experience, which enhances our capability to establish the most efficient financial structure for the development of our programs.
- **Strategically developing opportunities in Hong Kong to provide access to the PRC market.** The PRC is the world's second largest healthcare market (<https://seekingalpha.com/article/4038677-opportunities-chinas-healthcare-market>) and we plan to market our products there in the future as part of our overall growth strategy. In October 2017, the PRC government announced that the country is planning to accept trial data gathered overseas to speed up drug approvals (<https://www.reuters.com/article/us-china-pharmaceuticals/china-to-accept-overseas-trial-data-in-bid-to-speed-up-drug-approvals-idUSKBN1CE080> and <http://www.lawinfochina.com/display.aspx?id=26778&lib=law>), which is a potential boon for foreign pharmaceutical companies. We believe strategically locating our principal businesses in Hong Kong, as a Special Administrative Region of the PRC, may provide us distinctive advantages in accessing the PRC healthcare market. Two of our key collaborators, The University of Hong Kong (the "HKU") and the Chinese University of Hong Kong (the "CUHK") have received clinical drug trial accreditation by the NMPA for their clinical trial units/centers (<http://www.cmo.med.cuhk.edu.hk/en-us/cfdaaccreditation.aspx> and https://www.ctc.hku.hk/assurance_cfda.php).
- **Obtaining and leveraging government grants to fund project development.** The Hong Kong government pays close attention to the development of the biotechnology sector in Hong Kong and provides support and funding. We intend to aggressively seek government support from Hong Kong for our product development and to facilitate the development of some of our projects.

Arrangements with Other Parties

As mentioned above, part of our business model includes collaborating with research entities such as academic institutions and CROs, as well as highly regarded experts in their respective fields. We engage these entities and researchers either for purposes of exploring new innovations or advancing preclinical studies of our existing licensed drug candidates. Although the financial cost of these arrangements does not represent a material expense to the Company, the relationships we can access through, specifically, sponsored research arrangements ("SRAs") with academic institutions and organizations can provide significant value for our business; for example, we may decide whether to continue development of certain early-staged projects and/or out-license a project based on the data and results from research governed by SRAs. However, as of the date of this annual report, we do not consider the particulars of any of our SRAs to be material to the success of our current business plans.

Our drug discovery programs are based upon licenses from universities and are mainly conducted in universities via SRAs. As for the development of our drug candidates, our R&D Center conducts part of the CMC work. However, since our current facilities are not cGMP, cGLP or cGCP qualified, we will have to rely on CROs to conduct that type of work, if and when our drug candidates reach the level of development that requires such qualification.

Lead Projects, Dietary Supplement and Other Projects under Development

We are actively operating and managing the development of our drug and device candidates through various subsidiaries. Each candidate is being researched in a subsidiary with a medical/scientific area of focus related to the drug and device candidate in development. We refer to these as our "Project Companies" and their products or areas of focus as our Lead Projects (i.e., ALS-4 and SACT-1), our dietary supplement (i.e., DOI) or Other Projects under Development (as defined below). The selection of a drug and device candidate is based on our estimate of the market potential for that candidate, the scientific expertise required to develop it, and our overall corporate strategy, including our ability to commit personnel and future investment to that candidate.

To pursue a number of our current projects, our Project Companies have entered into standard license agreements with various university and licensing entities customized to the nature of each project. These license agreements largely contain the same terms, as is typically seen in license agreements for an early-stage life science invention; such terms include a worldwide license with licensed field comprising indications in the intended treatment areas, having upfront payments, certain royalty rates, sublicensing royalties, as well as provisions for payments upon occurrence of development and/or regulatory milestones. Under the license agreements, the Project Company must also adhere to certain diligence obligations and may or may not be required to obtain prior consent from the licensor to sublicense the invention. The license terms of our Lead Projects are discussed in detail below.

Generally speaking, pharmaceutical development consists of preclinical and clinical phases. Our immediate efforts would be on the preclinical phase which can further sub-divided into the following stages:

Target Identification & Selection: The target is the naturally existing cellular or modular structure that appears to have an important role in a particular disease pathway and will be targeted by the drug that will subsequently be developed. Target validation techniques for different disease areas can be very different but typically include from in vitro and in silico methods through to the use of whole animal models.

Lead Discovery: Following "Target Identification & Selection," compound screening assays are developed as part of the Lead Discovery. 'Lead' molecules can mean slightly different things to different researches or companies, but in this annual report, we refer to Lead Discovery as the process of identifying one or more small molecules with the desired activity against the identified targets. Leads can be identified through one or more approaches, which can depend on the target and what, if any, previous knowledge exists.

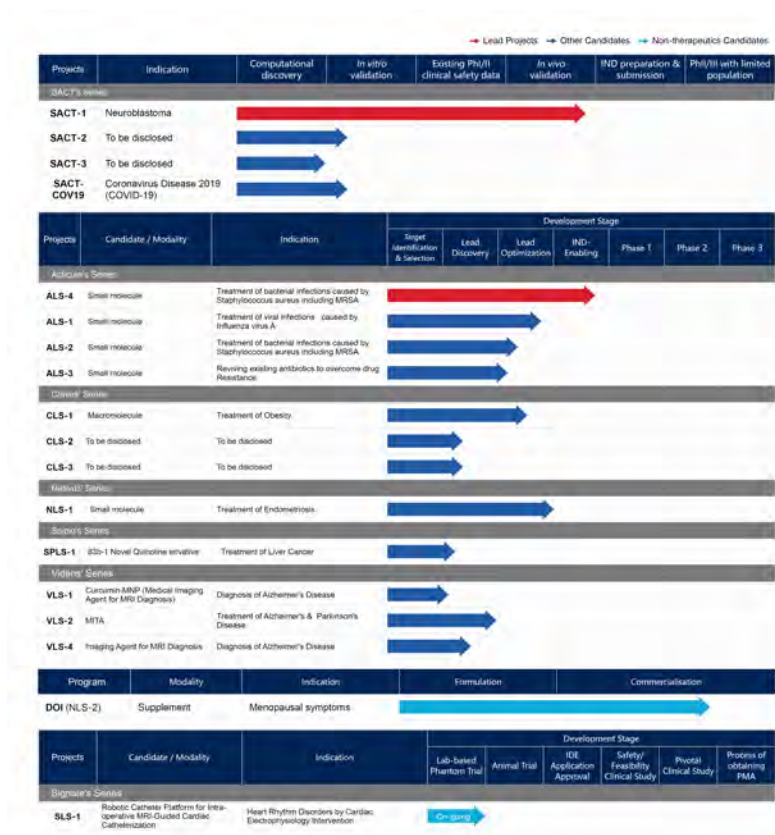
Lead Optimization: In this stage of the drug discovery process, the aim is to produce a preclinical drug candidate by maintaining the desired and favorable properties in the lead compounds, while repairing or reducing deficiencies in their structures. For example, to optimize the chemical structures to improve, among others, efficacy, reduce toxicity, improve metabolism, absorption and pharmacokinetic properties.

IND-Enabling Studies: Includes all the essential studies such as GLP toxicology studies, pharmacology and efficacy, pharmacokinetics, in vitro metabolism, CMC studies, and the data of which are used for IND submission.

In vitro validation: At this stage, the efficacy and safety of a drug candidate are assessed at cellular levels.

In vivo validation: At this stage, the efficacy, safety and pharmacokinetic of a drug candidate are assessed in animal models.

IND Preparation and Submission: Preparation of a package of documents for different sections such as CMC, clinical, nonclinical, etc. and getting them reviewed, approved and final checked and followed by submission to regulatory agencies.

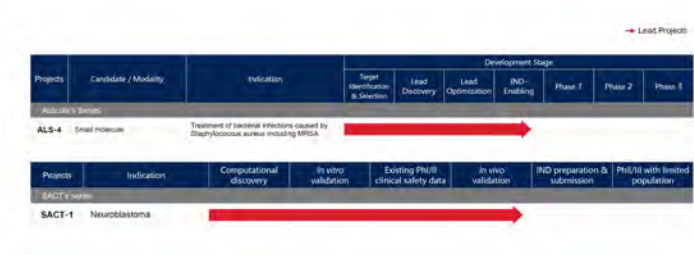


Another subsidiary, Aptorum Medical Limited ("AML"),¹ is our vehicle for developing our business of delivering medical services in the form of AML Clinic.

We anticipate allocating approximately 20% of our resources to develop projects other than our Lead Projects (such other projects being referred to herein as "Other Projects under Development"), with a strong focus on DOI, SLS-1 and AML Clinic. As part of the commercialization of DOI dietary supplement, we entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products. Through Multipak, the Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group's dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell™. As a device candidate, SLS-1 may not need to undergo the same regulatory approval process as a drug candidate and therefore we may be able to bring it to market sooner. AML Clinic is expected to provide us with a modest amount of revenue. Even if DOI and SLS-1 achieves commercial sales, of which there can be no assurance, revenue from these products alone will not be sufficient for us to carry out all of our plans, but it will assist with name recognition and supplement our income while we develop our Lead Projects.

¹ Clark Cheng, our Chief Medical Officer and an Executive Director, owns 7% of Aptorum Medical Limited as of the date of this annual report.

Lead Projects



After consideration of various factors, such as time and resources required for further development, potential success rate and market size, the Group decided to focus the majority of its resources on ALS-4 and SACT-1 as the current Lead Projects. The Group will continue to invest some of its resources to develop other projects, including those previously classified as Lead Projects.

ALS-4: Small molecule for the treatment of bacterial infections caused by Staphylococcus aureus including Methicillin-resistant Staphylococcus aureus (“MRSA”)

Just as certain strains of viruses, such as human immunodeficiency virus (“HIV”) and influenza have developed resistance to drugs developed to treat them, certain bacteria such as *Staphylococcus aureus*, *Mycobacterium tuberculosis* and *Pseudomonas aeruginosa* have become “superbugs”, having developed resistance to many, if not all, of the existing drugs available to treat them, rendering those treatments ineffective in many instances. MRSA is one such bacterium, a gram-positive bacterium that is genetically different from other strains of Staphylococcus aureus. Staphylococcus aureus and MRSA can cause a variety of problems ranging from skin infections and sepsis to pneumonia and bloodstream infections. It is estimated that about one out of every three people (33%) carry Staphylococcus aureus in their nose, usually without any illness; about two in a hundred (2%) carry MRSA (source: <https://www.cdc.gov/mrsa/tracking/index.html>). Both adults and children may carry MRSA.

Most MRSA infections occur in people who have been in hospital or other health care settings, such as nursing homes and dialysis centers (source: <https://www.mayoclinic.org/diseases-conditions/mrsa/symptoms-causes/syc-20375336>), which is known as Healthcare-Associated MRSA (“HA-MRSA”). HA-MRSA infections are typically associated with invasive procedures or devices, such as surgeries, intravenous tubing or artificial joints. Another type of MRSA infection, known as Community-Associated MRSA (“CA-MRSA”), has occurred in wider community among healthy people. It often begins as a painful skin boil and spreads by skin-to-skin contact. About 85% of serious, invasive MRSA infections are healthcare associated infections (<https://www.cdc.gov/media/pressrel/2007/r071016.htm>). The incidence of CA-MRSA varies according to population and geographic location. In the U.S., more than 94,000 people develop serious MRSA infection and about 19,000 patients die as a result each year (<https://www.cdc.gov/media/pressrel/2007/r071016.htm>). According to the US Centers for Disease Control and Prevention (“CDC”), Staphylococcus aureus, including MRSA, caused about 11% of healthcare-associated infections in 2011 (source: <http://www.healthcommunities.com/mrsa-infection/incidence.shtml>). Each year in the U.S., around one out of every twenty-five hospitalized patients contracts at least one infection in the hospital (N Engl J Med. 2014; 27:370(13):1198-208). In the U.S., there were over 80,000 invasive MRSA infections and 11,285 related deaths in 2011 (source: <https://edition.cnn.com/2013/06/28/us/mrsa-fast-facts/index.html>). Indeed, severe MRSA infections most commonly occur during or soon after inpatient medical care. More than 290,000 hospitalized patients are infected with Staphylococcus aureus and of these staphylococcal infections, approximately 126,000 are related to MRSA (source: <http://www.healthcommunities.com/mrsa-infection/incidence.shtml>).

ALS-4 is a small drug molecule which appears to target the products produced by bacterial genes that facilitate the successful colonization and survival of the bacterium in the body or that cause damage to the body’s systems. These products of bacterial genes are referred to as “virulence expression.” Targeting bacterial virulence is an alternative approach to antimicrobial therapy that offers promising opportunities to overcome the emergence and increasing prevalence of antibiotic-resistant bacteria.

Professor Richard Kao from The University of Hong Kong (who is also the Founder and Principal Investigator of Acticle and Inventor of ALS-2, ALS-3 and ALS-4) initiated a high throughput approach for screening compounds which are active against virulence expression, which resulted in the discovery of ALS-2, ALS-3 and ALS-4.

ALS-4 targets an enzyme essential for *Staphylococcus aureus* (including MRSA) survival in vivo. This enzyme is involved in the production of Staphyloxanthin, a carotenoid pigment produced by *Staphylococcus aureus* including MRSA, and is responsible for the characteristic golden color. This pigment has proven to be an important factor in promoting bacterial invasion as well as rendering the bacteria resistant to attack from reactive oxygen species (ROS) and neutrophils. In other words, pigmented bacteria have increased resistance to the host's immune defenses. ALS-4 may have particular value if it can be shown to be an effective therapy in situations where a *Staphylococcus aureus* infection is resistant to available antibiotics (i.e., where the pathogen is MRSA).

In a recent study by the inventor, Prof. Richard Kao, ALS-4 demonstrates potent activity against *Staphylococcus aureus* pigment formation in vitro, as indicated in Figure 1, with an IC₅₀ (IC₅₀ is defined as the concentration of a drug which inhibits half of the maximal response of a biochemical process. In this case, inhibition of the formation of the golden pigment is the response) equal to 20 nM.

Figure 1

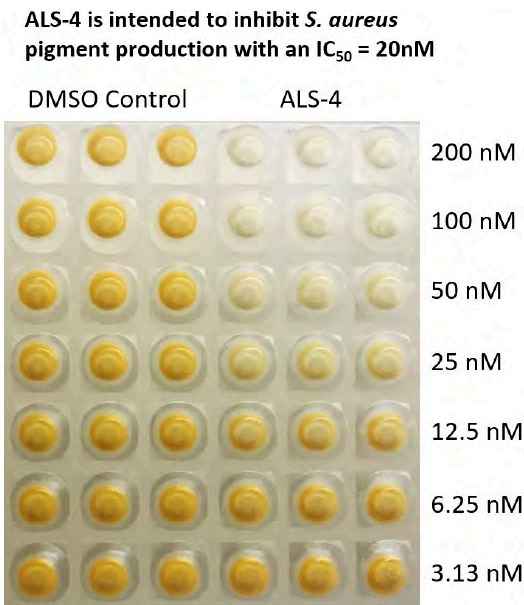


Figure 1: In vitro pigment inhibition by compound ALS-4.
(A) Inhibition of wild-type (WT) *Staphylococcus aureus* pigmentation in the presence of increasing concentrations of ALS-4.
(B) Pigment inhibition by ALS-4; the IC₅₀ for pigment formation is roughly 300 nM.
All data represent mean values ± SD.
NP16 = ALS-4
This assay was conducted in triplicate and repeated twice for confirmation
(Adapted from mBio (8(5): e01224, 2017))

By employing a systemic *Staphylococcus aureus* mouse infection model, the treatment (1mM of ALS-4 twice daily) and control groups (vehicle) were compared. In both acute treatment and delayed treatment groups, the bacterial counts in the kidneys of mice treated with compound ALS-4 were significantly lower than those of the no treatment group.

Figure 2

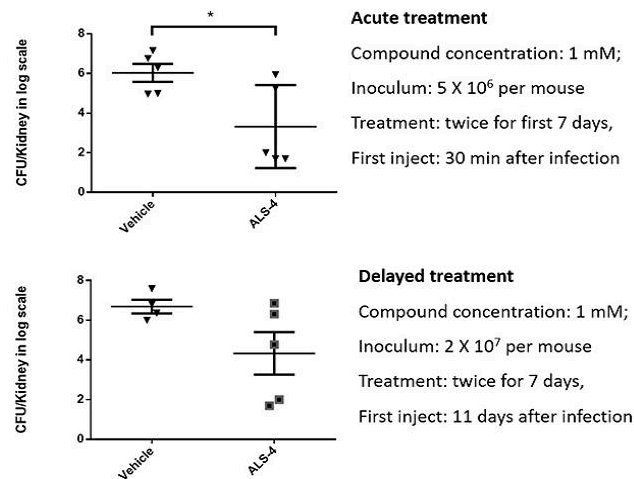


Figure 2: ALS-4 is observed to reduce bacterial load in mice

CFU = Colony Forming Unit, a unit used to estimate the number of viable bacteria in a sample

ALS-4 is currently undergoing IND enabling stage to perform all the essential studies which the data will be used for IND submission.

Patent License

On October 18, 2017, the Company’s subsidiary, Acticle, entered into an exclusive license agreement with Versitech Limited, the licensing entity of HKU, for ALS-4. Subsequently on June 7, 2018, the parties entered into a first amendment to the exclusive license agreement, and on July 10, 2019, the parties entered into a second amendment to the license agreement.

On January 11, 2019, Acticle and Versitech Limited entered into a second license agreement for ALS-4, where Acticle exclusively licensed the intellectual property rights on certain HKU-owned improvements to the original licensed invention.

Under the exclusive license agreements, we were granted an exclusive, royalty-bearing, sublicensable licenses to develop, make, have made, use, sell, offer for sale and import products that are covered by the licensed patents (as described below). The territory of the licenses is worldwide and the field of the licenses is for treatment or prevention of bacterial infections caused by *Staphylococcus aureus* including MRSA and bacterial virulence.

We paid an upfront fee upon entering into the license agreements. We are required to pay less than 10% of the net sales of the licensed products sold by us or our affiliates as royalties, as well as a low teens percentage of sublicense royalties that we receive from our sublicensees, if any. In addition, we agreed to pay to the licensor aggregate regulatory milestones of up to US\$1 million subject to the following achievements: submission of investigational new drug application; completion of phase 1, 2 and 3 clinical trials; and submission of new drug application; grant of regulatory approval. We also agreed to pay to the licensor aggregate sales milestones of up to US\$7.8 million subject to the following achievement: first commercial sale; and annual net sales exceeding US\$100 million in one jurisdiction.

Pursuant to the license agreements, Acticle became the exclusive licensee of 2 pending U.S. non-provisional patent applications and 2 PCT applications (now expired). Prior to the expiration of the PCT applications, we filed national phase applications in member states of the EPO, in PRC and 11 other jurisdictions. The claimed inventions are described as: "Compounds Affecting Pigment Production and Methods for Treatment of Bacterial Diseases."

Acticle has the right to grant sublicenses to third parties under the license agreements without prior approval from Versitech Limited and to assign the agreements to any successor to the business related to the licenses. In the event that Acticle makes an improvement to the licensed technologies, so long as the improvement does not incorporate any licensed patents, Acticle will be the owner to such improvement, subject to a non-exclusive royalty-free license being granted back to Versitech Limited for academic and research purposes only.

The exclusive license agreements shall be in effect until the expiration of all licensed patents (please refer to the patent expiration dates under "Item 4. Information on the Company – B. Business Overview – Intellectual Property"). Acticle may terminate the licenses at any time with 6-month written notice in advance. Either party may terminate the agreements upon a material breach by other party.

SACT-1: A Repurposed Drug for the Treatment of Neuroblastoma

Drug repurposing is a strategy for identifying new indications for approved or investigational drugs that are outside the scope of the original medical uses. It is often viewed as a lower-cost method for drug commercialization, as it is based on already-approved drugs (which has been proven to be safe for human use by the respective governing regulatory agency) and explores new target indications. (Ashburn, T. T. & Thor, K. B. Drug repositioning: identifying and developing new uses for existing drugs. *Nat. Rev. Drug Discov.* 3, 673–683, 2004).

One of the advantages of drug repurposing is a lower development risk due to safety and toxicity, as well as other properties related to water solubility, absorption, distribution and metabolism, as the safety and CMC profiles of marketed drugs are usually well-established. Due to the same reason, the development time is also shortened because there is no need to repeat the whole spectrum of the safety assessment. As a result, the drug repurposing approach appears to be attractive due to its superior risk management, smaller capital investment and quicker financial return. (Sudeep Pushpakom, et. al. Drug repurposing: progress, challenges and recommendations. *Nat. Rev. Drug Discov.* 18, 41–58, 2019)

The cost of bringing a repurposed drug is estimated to be around US\$300 million, which is only one-tenth of the development cost for a new drug. (Nosengo, N. Can you teach old drugs new tricks? *Nature.* 534, 314–316, 2016).

In summary, drug repurposing offers the following advantages:

- Well-established safety profiles: The development risk for new indications can be substantially reduced by applying existing drugs that are approved or have been shown to be safe in large scale late-stage trials. Since safety accounts for approximately 30% of drug failures in clinical trials, this is a key advantage that repositioned drugs can harness to great effect. (Key benefits of drug repositioning. (n.d.). Retrieved from <http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)

- Time-saving: As repositioned drugs can rely on existing data, including efficacy and toxicity studies, the process is usually faster than de novo development. Developing a new chemical entity (NCE) can take 10 to 17 years, depending on indications. (Roin, B. N. Solving the Problem of New Uses, 2013). For a drug repositioning company, the development process from compound identification to launch can be around 3 to 8 years. (Walker, N. (2017, December 07). Accelerating Drug Development Through Repurposing, Repositioning and Rescue. Retrieved from <https://www.pharmoutsourcing.com/Featured-Articles/345076-Accelerating-Drug-Development-Through-Repurposing-Repositioning-and-Rescue/>)
- Cost-saving: Along with time-saving, money-saving is also a key benefit. With a single compound to enter clinical trials costing around US\$10 to \$20 million, the cost of identifying a repositioning candidate that already has phase 1 data could be as low as US\$2 to \$3 million. (<http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Potential for out-licensing: Pharmaceutical companies are said to be exploring new models to out-license some of their clinical drug candidates that may have been shelved for pure business reasons unrelated to safety or efficacy, even though they have met their endpoints and have proven themselves to be safe. If such drugs were to be repositioned, the pharmaceutical company increases the attractiveness of these drugs and gives itself more options to find interested buyers. (<http://www.totalbiopharma.com/2012/07/04/4-key-benefits-drug-repositioning/>)
- Lower failure rate: According to BCC Research, approval rates for repurposed drugs are close to 30%, which is greater than the approval rate for new drug applications. (Front Oncol. 2017; 7: 273)

One of the major limitations of the current drug repurposing and repositioning practice is that there is a lack of a systematic way to identify and reinvestigate drugs that are approved and/or have failed approval.

SACT-1 is the first repurposed drug candidate to be developed under the Smart-ACTTM drug discovery platform. SCAT-1 is one of the Company's proprietary technologies. Our first targeted indication is neuroblastoma. Neuroblastoma is a rare form of cancer, and classified as an orphan disease, that forms in certain types of nerve tissue and most frequently in the adrenal glands as well as spine, chest, abdomen or neck, predominantly in children, especially for those aged 5 years and below. For the high-risk group, which is close to 20% (Annu Rev Med. 2015; 66: 49-63.) of total new patient population per year, the 5-year survival rate of this condition is around 40-50% as observed by the American Cancer Society (<https://www.cancer.org/cancer/neuroblastoma/detection-diagnosis-staging/survival-rates.html>). The current high drug treatment cost for high risk patients can average USD200,000 per regimen (all 6 cycles) (https://www.cadth.ca/sites/default/files/pcodr/Reviews2019/10154DinutuximabNeuroblastoma_fnEGR_NOREDACT-ABBREV_Post_26Mar2019_final.pdf). In addition, most pediatric patients often do not tolerate or survive the relevant chemotherapy stage which, subject to further clinical studies, may be positively addressed by the SACT-1 candidate due to the potential synergistic effects when applied with standard chemotherapy.

In our recent studies, SACT-1 has been shown to be effective against numerous neuroblastoma cell lines, of which 2 are MYCN-amplified cells, which represent the high-risk neuroblastoma patient group. In addition, by using a bliss score as a quantitative measure of the extent of drug interaction, Aptorum Group has seen a high and robust synergism between SACT-1 and traditional chemotherapy in vitro (Figure 3), indicating a potential efficacy enhancement/dose reduction of the chemotherapy.

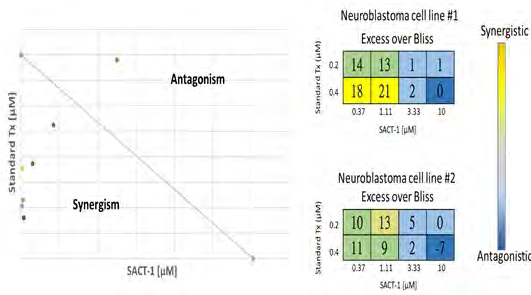


Figure 3 synergism between SACT-1 and traditional chemotherapy in vitro

In addition, in our recent study, the maximum tolerable dose of SACT-1 in a rodent model was determined to be higher than 400mg/kg. Compared with the MTD of standard chemotherapy such as paclitaxel (20-30mg/kg) (Clin Cancer Res. 5(11):3632-8) and cisplatin (6mg/kg) (BMC Cancer 17: 684 (2017)), the safety profile of SACT-1 appears to be very impressive. Based on our internal observations of pre-existing information from approved products, (subject to FDA's approval and on a case-by-case basis, a 505(b)(2) Application can rely in part on existing information from approved products (such as the FDA's previous findings on safety and efficacy) or products in literature (such as data available). However, typically speaking, the applicant is nonetheless required to carry out a Phase 1 bridging study to compare the Reference Listed Drug and reference the established safety and efficacy information), SACT-1 also exhibits a well-established safety profile: at 150mg/day, the death rate was 0% in prior clinical studies with no dosage related adverse events (Table 1). In addition, the pharmacokinetic profile of SACT-1 has also been reported (Table 2).

Table 1: Safety Profiles of SACT-1 in Human Clinical Trials

SACT-1	25mg/day (N=93)	75mg/day (N=95)	150mg/day (N=91)
Median treatment duration, weeks	101	100	100
Adverse events (AE)			
Any grade 2-4 AE at least possibly related to SP055	20%	20%	21%
AEs leading to discontinuation	9%	12%	14%
Any serious AE	13%	14%	10%
Deaths	0%	2%	0%

Table 2: The pharmacokinetic Profile of SACT-1 in Humans

SCAT-1 pharmacokinetic parameter in humans	(N=19)
t_{max} , h	5
C_{max} , ng/ml	~300
AUC_{last} , ng·h/ml	~10,000
AUC_{inf} , ng·h/ml	~11,000
$t_{1/2,term}$, h	~48

We are currently developing a pediatric formulation of SACT-1 to better address the needs of neuroblastoma patients who are exclusively children younger than 5. SACT-1 is currently undergoing the final stage of in vivo validation and an IND package is also being prepared and IND submission to FDA is targeted at the second half of 2020.

Statistical Significance

The term statistical significance is to define the probability that a measured difference between two groups (e.g. two treatment groups, treatment versus control groups) is the result of a real difference in the tested variations and not the result of chance. It means that the result of a test does not appear randomly or by chance, but because of a specific change that is tested, so it can be attributed to a specific cause.

The confidence level indicates to what percentage the test results will not commit a type 1 error, the false positive. A false positive occurs when a change in the result is due to randomness (or other noise) and not the change in variations. At a 95% confidence level ($p = 0.05$), there is a 5% chance that the test results are due to a type 1 error. 95% has become the standard and usually be the minimum confidence level for the tests. To make the test more stringent, a 99% confidence level ($p = 0.01$) is also commonly employed, which means that there is a 1% chance that the test results are due to a type 1 error.

In other words, a p value represents the confidence level. For example, if the p-value for a test is < 0.05 , it means that there is less than 5% chance the difference between two groups is due to random error or by chance. If the p-value is < 0.01 , it means that there is less than 1% chance the difference between two groups is due to random error or by chance.

We employed statistical testing to compare different treatment groups in animal studies simply for proof of concept and to aid internal decision making for further development. We do not intend to use this standard for any regulatory submission. The US FDA or other regulatory agencies may not necessarily employ the same statistical standard to assess the efficacy in clinical trials, the results of which would be submitted for regulatory approval. Although a p-value of 0.05 has become the standard, the US FDA or other regulatory agencies may also individualize their efficacy standard for different clinical programs based on the indications, the purpose of a clinical trial, among others.

FDA Application Status

As of the date of this annual report, we have not submitted any applications for investigational new drugs ("IND") to the US Food and Drug Administration ("FDA"). By the second half of 2020, subject to regulatory review, we expect to be in a position to submit at least one application for one of our drug candidates to commence trials in humans (INDs to the FDA or an equivalent application to the regulatory authorities in another jurisdiction such as the China's National Medical Products Administration (the "NMPA") or the European Medicines Agency ("EMA")). However, there can be no assurance we will be able to make any such application by such time. Should we be delayed in making such filing or should such filing not be approved, our business will be adversely affected.

Other Projects under Development

The following provides additional detail regarding Other Projects under Development. As noted elsewhere in this report, based on certain criteria, we sometimes cease work on certain projects to focus on projects we believe are more promising. For example, prior filings disclose that we were developing the drug candidate NLS-3. However, we have discontinued the development of such candidate because the expected result could not be generated, so we decided to focus our capital and efforts on our other candidates.

SACT-COV19: Drug repurposing for the treatment of infections caused by COVID-19

SACT-COV19 is a drug repurposing program for the treatment of infections caused by COVID-19. We have completed initial screening under the Smart-ACT™ platform to select, out of more than 2,600 small drug molecules that were previously approved for other indications, at least 3 potential candidates for further preclinical investigation against the new coronavirus disease, COVID-19. We are collaborating with Toronto based Covar Pharmaceuticals and have also entered into agreement with the University of Hong Kong's Microbiology Department to conduct further preclinical investigation of the selected candidates prior to seeking approval from regulatory agencies to initiate clinical trials on suitable candidates.

Drug candidates from the SACT-COV19 program are currently undergoing in vitro validation.

ALS-1: Small molecule intended for the treatment of viral infections caused by Influenza virus A

Professor Richard Kao, the Inventor of ALS-1, was the first to identify viral nucleoproteins (NP) as an effective drug target (Nature Biotechnology. 28:600-605) We are exploring ALS-1 as a potential treatment for viral infections caused by Influenza virus A.

It is our hypothesis that Influenza A NP is an essential protein for the proliferation of the influenza virus. ALS-1 targets NP and triggers the aggregation of NP and this prevents the aggregated NP from entering the nucleus. In an animal study published by the inventor, Prof. Richard Kao, in Nature Biotechnology (28 (6): 600, 2010), after treating with ALS-1, 50% of the mice receiving two doses of ALS-1 (100 µl of 2.3 mg/ml ALS-1) per day for 7 days survived for more than 21 days compared with 100% mortality in the treatment-free control group within 7 days. In addition, about a 10x reduction of viral load in the lungs of the ALS-1-treated mice was observed compared to the untreated control group. The animal study results suggest that ALS-1 has the potential to be developed into a useful anti-influenza therapeutic.

ALS-1 is designed to target a broad range of NP variants, a novel therapeutic target. Compared with the currently marketed antiviral drugs for which the viruses have acquired extensive resistance, ALS-1 acts on a completely different therapeutic target.

ALS-1 is currently undergoing Lead Optimization to optimize its drug-like properties.

ALS-2: Small molecule for the treatment of bacterial infections caused by Staphylococcus aureus including MRSA

ALS-2 is a next generation small molecule targeting bacterial virulence for the treatment of bacterial infections caused by Staphylococcus aureus including MRSA. In a recent paper published by the inventor, Professor Richard Kao from The University of Hong Kong (also the Founder and Principal Investigator of Acticle), in PNAS (115(310): 8003, 2018), ALS-2 suppresses the expression of multiple virulence factors in Staphylococcus aureus simultaneously. In a lethal infection mouse model, compared with the vehicle group, ALS-2 protected against Staphylococcus aureus for all the mice in the group, with significant differences between the treatment and control groups [P = 0.0057, by log-rank (Mantel-Cox) test].

ALS-2 is currently at the Lead Optimization stage to optimize its drug-like properties.

ALS-3: Small molecule acting synergistically with certain existing antibiotics

ALS-3 is a novel small molecule that is at present under investigation to combine with certain classes of existing antibiotics to overcome drug resistance. We are exploring ALS-3 for the treatment of bacterial infections including MRSA. ALS-3 is currently at the Lead Optimization stage to optimize its drug-like properties.

CLS-1: An orally administered macromolecule for the treatment of obesity based on chemical signaling of gut microbiome

The prevalence of obesity continues to escalate globally; however, there is no current optimal therapy for this condition. For the majority of obese patients, conventional medical therapies (i.e., diet, exercise, behavioral counseling) often have a high failure rate for the long term. (Obes Surg. 2012;22(6):956-66). We believe current pharmacotherapy has limited efficacy and is associated with substantial safety issues.

Chemical signaling of gut microbiota is known to be one of the major causes of obesity. CLS-1 is an orally administered non-absorbable macromolecule that we believe modulate the metabolite excreted by gut microbiota with high affinity and specificity. In this way, we believe the absorption of this particular metabolite, which is linked to obesity, can be inhibited.

CLS-1 is undergoing Lead Optimization.

NLS-1: A Derivative of Epigallocatechin-3-Gallate ("Pro-EGCG") for the treatment of Endometriosis

NLS-1, a drug molecule derived from natural products (green tea), is currently under development for the treatment of endometriosis, a disease in which the tissue that normally lines the uterus (endometrium) grows outside the uterus.

NLS-1 acts as an anti-angiogenic to offer a potential novel treatment of endometriosis. In a paper published by the inventors in Angiogenesis (16:59, 2013), NLS-1 brought a statistically significant reduction in the lesion size and weight compared with EGCG and the control without any treatment in an experimental endometriosis mouse model (Student t-test, $p < 0.05$). In addition, the inhibition by NLS-1 in all of the angiogenesis parameters was statistically significantly greater than that by EGCG (Student t-test, $p < 0.05$). In addition, NLS-1 significantly (Student t-test, $p < 0.05$) reduces the lesion size in both prevention and treatment group compared with both saline and EGCG groups. Moreover, NLS-1 also had better bioavailability and greater antioxidation and anti-angiogenesis capacities compared with EGCG. As a follow-up study in an animal model of endometriosis, orally administered NLS-1 reduced the lesion size significantly better than oral EGCG ($p < 0.05$ - 0.001 at week 3-8, ANOVA) and other hormone-based therapy such as intramuscular GnRH analog ($p < 0.05$ at week 4-8, ANOVA) and other synthetic anti-angiogenesis agents such as intraperitoneal PTK787 ($p < 0.05$ - 0.01 at week 4-8, ANOVA). Regarding safety, there was no sign of stress to NLS-1 administration were observed during the treatment period. No significant weight change was observed over the course of the experiment. Histological examination revealed no obvious reproductive effects on ovarian follicles and endometrial glands under NLS-1 treatments. Also, vascularization of the ovaries and the uterus was not affected in the NLS-1 treatment group.

We are currently undergoing some activities to enable NLS-1 to enter IND-enabling studies.

SPLS-1: A quinoline derivative for liver cancer treatment

SPLS-1, a novel quinoline derivative from Ephedra pachyclada, is at present under active investigation for the treatment of liver cancer. It is currently at the Lead Discovery stage.

VLS-1: Curcumin-conjugated superparamagnetic iron oxide nanoparticles ("Curcumin-MNP") for MRI ("magnetic resonance imaging") imaging of amyloid beta plaques in Alzheimer's disease ("AD")

VLS-1 is an MRI contrast agent, which the Company believes may enable superior imaging for identifying amyloid beta plaques in Alzheimer's disease. VLS-1 differs from other existing contrast agents for amyloid imaging, such as Amyvid (Eli Lilly), Vizamy (GE Healthcare) and Neuraceq (Piramal Healthcare), in the following respects: 1) utilization of a natural compound, curcumin, with a known high amyloid beta binding affinity and proven safety; 2) a nanoparticle-based system to enhance delivery efficiency to the brain; and 3) the combination of curcumin with iron oxide, known to be an effective MRI contrast agent. VLS-1 is currently at the Lead Discovery stage.

VLS-2: mTOR-independent transcription factor EB activator ("MITA") as autophagy activator for treatment of neurodegenerative diseases

Autophagy is an endogenous cellular mechanism for clearing multiple pathological protein aggregates including tau, the presence of which is believed to account for neurodegeneration in AD and other neurodegenerative diseases. mTOR is part of a biological pathway that is a central regulator of mammalian metabolism and physiology. Inhibition of mTOR activity is associated with various side effects, such as immunosuppression. Many other molecules that activate autophagy also inhibit mTOR activity. VLS-2 is a small drug molecule that appears to activate autophagy without inhibiting mTOR function. VLS-2 is currently at the Lead Discovery stage.

VLS-4: Other contrast agents for MRI diagnostics

In addition to VLS-1, the Company is actively developing a new class of MRI contrast agents for diagnosis of neurodegenerative diseases. The design of these agents takes into consideration the physicochemical properties that need to be optimized for best imaging performance, and the novel agents are currently undergoing rigorous evaluation. VLS-4 is currently at the Lead Discovery stage.

SLS-1: Robotic Catheter Platform for Intra-operative MRI-guided Cardiac Catheterization

SLS-1 is our robotic catheter platform for MRI-guided cardiovascular intervention for the treatment of arrhythmia. The platform consists of a magnetic resonance imaging-guided ("MRI-guided") robotic electrophysiology ("EP") catheter system, an MR-based positional tracking unit, and a navigation interface. This platform has the potential to offer a major step toward achievement of several clinical goals: (i) enhancing catheter manipulation and lesion ablation, which we believe will decrease the chance of arrhythmia recurrence; (ii) improving the safety of catheter navigation, thereby decreasing the rates of undesired or inadvertent tissue damage; and (iii) enhancing catheter control, thus facilitating shorter learning curves for surgeons and better treatment in more complex patient cases. Should such goals be demonstrated, patient outcomes should be improved, compensating for the cost of using MRI and reducing the overall expenditure.

To date, a product prototype has been developed. Lab-based experiments have been conducted to verify the performance of the robot towards an image-guided pulmonary vein isolation ("PVI") task. The MR-based tracking unit has also been developed and validated in MRI scanners. The next step is to test the robotic catheterization using a dynamic heart phantom simulated with the pulsatile liquid flow. Preclinical trials can then be conducted with all the components ready. Radiofrequency ablation will be conducted in a live porcine model, prepared with arrhythmia. If all the results are positive, we will approach the US FDA or other regulatory agencies to apply for conducting clinical trials on the equipment.

SLS-1 is currently in Lab-based Phantom Trial and it will follow the regulatory pathway for approval as indicated in the table in Page 43.

Aptorum Medical Limited - AML Clinic

Incorporated in August 2017, Aptorum Medical Limited is a Hong Kong-based company incorporated in Cayman Islands focused on delivering premium healthcare and clinic services. AML can draw on the expertise of many of the region's most experienced medical practitioners, and is committed to providing a comprehensive cross-functional facility for healthcare professionals to practice evidence-based medicine and offer high-quality medical services to their patients. We also intend that AML will offer to conduct clinical trials of both the Company's and third parties' new drug and device products.

Effective as of March 2018, we leased office space in Central, Hong Kong, the commercial and financial heart of Hong Kong, as the home to AML Clinic. We operate the AML Clinic under the name of Talem Medical. AML Clinic commenced operation in June 2018.

The recently renovated medical center is staffed by our group of medical professionals and offers state-of-the-art facilities. Initially we expect to focus our expertise on treatment of chronic diseases resulting from modern sedentary lifestyles and an aging population.

Dietary supplement

NLS-2: DOI, a Bioactive Ingredient (DOI) in Chinese Yam for the Relief of Menopausal Symptoms as a Dietary Supplement.

DOI is a dietary supplement made with the bioactive ingredient extracted Chinese yam powder containing "DOI", which is Aptorum Group's non-hormonal approach intended to meet certain growing consumer nutritional trends and concerns. It is estimated that 1.2 billion women worldwide will be menopausal or postmenopausal by the year 2030¹. The global woman's health supplement market for menopausal symptoms is projected to reach over USD\$50bn by 2025 with a CAGR rate of 16.4% (2016-2025)². Initially, the supplement will be commercialized and sold in Hong Kong; the Company is seeking regulatory clearance to market the product in other major jurisdictions.

¹ World Health Technical Report Series. Research on the Menopause in the 1990's. Geneva, Switzerland: World Health Organization; 1996.

² <https://www.grandviewresearch.com/press-release/global-isoflavones-market>

As part of the commercialization, Aptorum Group, through its wholly-owned subsidiary Nativus Life Sciences Limited, entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products (the "Multipak Agreement"). Pursuant to the Multipak Agreement, Multipak is appointed as a non-exclusive distributor for the distribution and release of NativusWell™, yam powder tablets to be formulated according to proprietary technologies of Nativus and the Group in Hong Kong and China, and such other territories as agreed by both parties from time to time.

Through Multipak, Aptorum Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group's dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell™. The Multipak Agreement has a term of one year, which shall automatically renew for four additional one-year terms, unless terminated by either party with at least 30 days prior written notice. Either party may also terminate the Multipak Agreement upon written notice to the other party if such other party commits a material breach of the terms and conditions of the agreement and it is not remedied within 30 days' notice or if the other party cannot pay its debts or becomes insolvent, or otherwise is involved in a bankruptcy or liquidation proceeding. Nativus also has the option to terminate the agreement upon written notice to Multipak upon the occurrence of certain events, including: if Multipak is later by more than 30 days in paying amounts due under the agreement, Multipak challenges the validity of any of Nativus' or the Group's intellectual property, Multipak does something that could reasonably be expected to have an adverse effect on the reputation of Nativus or the Group, or Multipak has a change in control for which Nativus did not pre-approve. During the 3-month period following any termination (the "Sell-Off Period"), Multipak may sell of its stock of products, but may not return any, nor shall Nativus have any liability for breach of warranty for such product during the Sell-Off Period. At the end of Multipak Agreement also provides for certain indemnities of each party.

The NativusWell™ tablets are natural, non-hormonal supplements containing DOI. The yam powder with DOI utilizes a non-hormonal approach that is intended to boost the general wellness of women undergoing menopause. Third party scientific studies indicate that DOI, the naturally occurring bioactive ingredient in Chinese yam, appears to stimulate estradiol biosynthesis, induce estradiol and progesterone secretion and increase bone density, thereby potentially counteracting the progression of osteoporosis³, one of the common symptoms associated with menopause⁴.

Competition

Our industry is highly competitive and subject to rapid and significant change. While we believe that our development and commercialization experience, scientific knowledge and industry relationships provide us with competitive advantages, we face competition from pharmaceutical and biotechnology companies, including specialty pharmaceutical companies, and generic drug companies, academic institutions, government agencies and research institutions.

There are a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of drugs and devices for the diagnosis and treatment of diseases for which we are developing products or technology. Moreover, a number of additional drugs are currently in clinical trials and may become competitors if and when they receive regulatory approval.

Many of our competitors have longer operating histories, better name recognition, stronger management capabilities, better supplier relationships, a larger technical staff and sales force and greater financial, technical or marketing resources than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Our commercial opportunity could be reduced or eliminated if our competitors develop or market products or other novel therapies that are more effective, safer or less costly than our current drug candidates, or any future drug candidates we may develop, or obtain regulatory approval for their products more rapidly than we may obtain approval for our current drug candidates or any such future drug candidates. Our success will be based in part on our ability to identify, develop and manage a portfolio of drug and device candidates that are safer and more effective than competing products.

³ <https://www.ke.hku.hk/story/innovation/the-magic-of-chinese-yam-for-treatment-of-menopausal-syndrome>; see also, Scientific Reports, 5-10179.

⁴ <https://www.everydayhealth.com/menopause/osteoporosis-and-menopause.aspx>

Inflation

Inflation affects us by generally increasing our cost of labor and research and development costs, the way it does to all labor and research costs. However, we do not anticipate that inflation will materially affect our business in the foreseeable future.

Seasonality

We believe our operation and sales do not experience seasonality.

Employees

As of the date of this annual report, we have 37 employees, including 36 full-time employees and 1 part-time employee. Of these, 12 are engaged in full-time research and development and laboratory operations, 18 are engaged in general and administrative functions, 6 are full-time employees engaged in the clinic operation and 1 part-time employee is engaged in legal clerical support. As of the date of this annual report, 37 of our employees are located in Hong Kong. In addition, we have engaged and may continue to engage 39 independent contracted consultants and advisors to assist us with our operations. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have never experienced any employment related work stoppages, and we consider our relations with our employees to be good.

Intellectual Property

The technologies underlying our various research and development projects are the subject of various patents and patent applications claiming, in certain instances, composition of matter and, in other instances, methods of use. Prosecution, maintenance and enforcement of these patents, as well as those on any future protectable technologies we may acquire, are and will continue to be an important part of our strategy to develop and commercialize novel medicines and medical devices, as described in more detail below. Through entering into license agreements with their owners, we have obtained exclusive rights to these patents, applications and related know-how in the U.S. and certain other countries to develop, manufacture and commercialize the products using or incorporating the protected inventions that are described in this annual report and that are expected to contribute significant value to our business. The technologies protected by these patents may also form the basis for the development of other products.

In addition to licensed intellectual property, our in-house science team has been actively developing our own proprietary intellectual property. We have filed a number of provisional applications to establish earlier filing dates for certain of our other ongoing researches, the specifics of which are currently proprietary and confidential, including our Lead Project SACT-1.

The U.S. patent system permits the filing of provisional and non-provisional patent applications (i.e., a regular patent application). A non-provisional patent application is examined by the USPTO, and can mature into a patent once the USPTO determines that the claimed invention meets the standards for patentability. On the other hand, a provisional patent application is not examined for patentability, and automatically expires 12 months after its filing date. As a result, a provisional patent application cannot mature into a patent.

Provisional applications are often used, among other things, to establish an earlier filing date for a subsequent non-provisional patent application. The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained.

The effective filing date of a non-provisional patent application is used by the USPTO to determine what information is prior art when it considers the patentability of a claimed invention. If certain requirements are satisfied, a non-provisional patent application can claim the benefit of the filing date of an earlier filed provisional patent application. As a result, the filing date accorded by the provisional patent application may supersede information that otherwise could preclude the patentability of an invention.

A provisional patent application is not eligible to become an issued patent unless, among other things, we file a non-provisional patent application within 12 months of the filing date of the provisional patent application. If we do not timely file a non-provisional patent application claiming priority to said provisional application, we may lose our priority date with respect to our provisional patent applications. Further, if any (self or by others) publication of the invention is made after such priority date, and if we do not file a non-provisional application claiming priority to said provisional application, our invention may become unpatentable.

Moreover, we cannot predict whether such future patent applications will result in the issuance of patents that effectively protect any of our product candidates or will effectively prevent others from commercializing competitive products.

We do not expect to incur material expenses in the prosecution of the provisional applications or other licensed patent applications. We expect to fund the patent costs from our cash and restricted cash.

The value of our drug and device products will depend significantly on our ability to obtain and maintain patent and other proprietary protection for those products, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and proprietary rights of other parties.

As of the date hereof, we are the patentee of a number of provisional and non-provisional patent applications, both on our proprietarily developed projects and improvement to our in-licensed projects.

The following table sets forth a list of our patent rights under the exclusive licenses as of the date of this annual report related to our Lead Project, ALS-4; on the other hand, our other Lead Project, SACT-1 is a proprietary technology not subject to any license agreement:

Project Company / Project name	License Agreement	Licensors(s)	Licensee	Licensed / IP Rights	Patent Expiration Dates
Acticle / ALS-4	Exclusive Patent License Agreement, dated October 18, 2017	Versitech Limited	Acticle Life Sciences Limited	Exclusive licensee: 1 U.S. patent (US10471045), 2 pending U.S. applications (16/041,838 and US 16/679,313), 2 pending European applications (EP18835480.7 and EP18835238.9), 2 pending PRC application (CN201880048665.6 and 201880048674.5), 17 pending applications in other foreign jurisdictions including Australia, Brazil, Canada, Chile, Eurasia, Israel, Japan, Korea, Malaysia, New Zealand, Singapore	The licensed IP rights include granted patents in the U.S. and pending patent applications in the U.S., Europe, PRC and 11 other foreign jurisdictions. The U.S. patent will expire in 2038; any other patent based on the pending application, if granted, will have a 20-year patent term from 2018.
	First Amendment to Exclusive License Agreement, dated June 7, 2018				
	Second Amendment to Exclusive License Agreement dated July 10, 2019				
	Exclusive Patent License Agreement dated January 11, 2019				

Because of the extensive time required for clinical development and regulatory review of a drug we may develop, it is possible that, before any of our drug and device candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent. If appropriate, the Company may seek to extend the period during which it has exclusive rights to a product by pursuing patent term extensions and marketing exclusivity periods that are available from the regulatory authorities of certain countries (including the United States) and the EPO.

Even though the Company has certain patent rights, the ability to obtain and maintain protection of biotechnology and pharmaceutical products and processes such as those we intend to develop and commercialize involves complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in such patents has emerged to date in the U.S. The scope of patent protection outside the United States is even more uncertain. Changes in the patent laws or in interpretations of patent laws in the United States and other countries have diminished (and may further diminish) our ability to protect our inventions and enforce our IP rights and, more generally, could affect the value of IP.

While we have already secured rights to a number of issued patents directed to our drug candidates, we cannot predict the breadth of claims that may issue from the pending patent applications and provisional patents that we have licensed or that we have filed. Substantial scientific and commercial research has been conducted for many years in the areas in which we have focused our development efforts, which has resulted in other parties having a number of issued patents, provisional patents and pending patent applications relating to such areas. The patent examiner in any particular jurisdiction may take the view that prior issued patents and prior publications render our patent claims "obvious" and therefore unpatentable or require us to reduce the scope of the claims for which we are seeking patent protection.

In addition, patent applications in the United States and elsewhere generally are not available to the public until at least 18 months from the priority date, and the publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made. Therefore, patent applications relating to drugs and devices similar to our drug and device candidates may have already been filed, which (if they result in issued patents) could restrict or prohibit our ability to commercialize our drug and device candidates.

The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other IP rights. Our ability to prevent competition for our drug and device candidates and technologies will depend on our success in obtaining patents containing substantial and enforceable claims for those candidates and enforcing those claims once granted. With respect to any applications which have not yet resulted in issued patents, there can be no assurance that meaningful claims will be obtained. Even issued patents may be challenged or invalidated. If others have prepared and filed patent applications in the United States that also claim technology to which we have filed patent applications or otherwise wish to challenge our patents, we may have to participate in interferences, post-grant reviews, inter parties reviews, derivation or other proceedings in the USPTO and other patent offices to determine issues such as priority of claimed invention or validity of such patent applications as well as our own patent applications and issued patents. Patents may also be circumvented, and our competitors may be able to independently develop and commercialize similar drugs or mimic our technology, business model or strategy without infringing our patents. The rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar technology.

We may rely, in some limited circumstances, on unpatented trade secrets and know-how to protect aspects of our technology. However, it is challenging to monitor and prevent the disclosure of trade secrets. We seek to protect our proprietary trade secrets and know-how, in part, by entering into confidentiality agreements with consultants, scientific advisors and contractors and invention assignment agreements with our employees. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, giving our competitors knowledge of our trade secrets and know-how, and we may not have adequate remedies for any such breach, in which case our business could be adversely affected. Our trade secrets will not prevent our competitors from independently discovering or developing the same know-how. Although our agreements with our consultants, contractors or collaborators require them to provide us only original work product and prohibit them from incorporating or using IP owned by others in their work for us, if they breach these obligations, disputes may arise as to the rights in any know-how or inventions that arise from their work.

Our commercial success will also depend in part on not infringing the proprietary rights of other parties. Although we seek to review the patent landscape relevant to our technologies on an ongoing basis, we may become aware of a new patent which has been issued to others with claims covering or related to aspects of one of our drug or device candidate. The issuance of such a patent could require us to alter our development plans for that candidate, redesign the candidate, obtain a license from the patent holder or cease development. Our inability to obtain a license to proprietary rights that we may require to develop or commercialize any of our drug and device candidates would have a material adverse impact on us.

Trademarks

As of the date of this annual report, we own trademark registrations covering the trade names and logos of Aptorum and our subsidiaries, including but not limited to “APTORUM”, “APTORUM THERAPEUTICS,” “VIDENS LIFE SCIENCES,” “ACTICULE LIFE SCIENCES,” “CLAVES LIFE SCIENCES”, “NATIVUS LIFE SCIENCES”, “SCIPPIO LIFE SCIENCES”, “TALEM,” “Talem in Chinese characters,” “SMART PHARMA”, in jurisdictions Hong Kong, EU and the United Kingdom and PRC. Furthermore, we are in the process of applying for registration of trademarks in jurisdictions including the U.S. and PRC.

We also own certain unregistered trademark rights or have submitted applications for trademarks for our and our subsidiaries’ trade names and logos.

All other trade names, trademarks and service marks of other companies appearing in this annual report are the property of their respective holders. Solely for convenience, the trademarks and trade names in annual report are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Legal Proceedings

From time to time, we are subject to legal proceedings, investigations and claims incidental to the conduct of our business. We are not currently a party to any legal proceeding or investigation which, in the opinion of our management, is likely to have a material adverse effect on our business, financial condition or results of operations.

Regulations

Government authorities in the United States at the federal, state and local level and in other countries extensively regulate, among other things, the research and clinical development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing, pricing, export and import of drug and device products ("Regulated Products"), such as those we are developing. Generally, before a new Regulated Product can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized to address the requirements of and in the format specific to each regulatory authority, submitted for review and approved by the regulatory authority. This process is very lengthy and expensive, and success is uncertain.

Regulated Products are also subject to other federal, state and local statutes and regulations in the United States and other countries, as applicable. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable regulatory requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the regulatory authority's refusal to approve pending applications, withdrawal of an approval, clinical holds, untitled or warning letters, voluntary product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, injunctions, disbarment, fines, refusals of government contracts, restitution, disgorgement, or civil or criminal penalties. Any such administrative or judicial enforcement action could have a material adverse effect on us.

As the Company's principal place of business is in Hong Kong, and because AML Clinic is located there, the Company is subject to various Hong Kong laws and regulation covering its business activities there, described in further detail below. Also, the Company anticipates that, if it obtains marketing approval for any of its drug and device candidates, it intends to focus its marketing and sales efforts primarily in three regions: the United States, Europe and PRC. The regulatory framework for each of these regions is described below.

U.S. Drug Development Process

The process of obtaining regulatory approvals and maintaining compliance with appropriate federal, state and local statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process, or after approval, may subject an applicant to administrative or judicial sanctions or lead to voluntary product recalls. Administrative or judicial sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of non-clinical laboratory tests, preclinical studies according to cGLP and manufacturing of clinical supplies according to cGMP;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent IRB, at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials according to cGCP, to establish the safety and efficacy of the proposed product for its intended use;
- preparation and submission to the FDA of an NDA, for a drug;

- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with cGMP; and
- payment of user fees and the FDA review and approval of the NDA.

Devices are subject to different forms of testing and approval, but (except for certain laboratory-developed diagnostic tests) still require satisfaction of various FDA requirements in order to be brought to market. As of the date of this annual report, the device candidate currently under development is SLS-1. We do not currently have a commercialization timeline for SLS-1 and cannot assure you that SLS-1 will ever be ready for commercialization.

The testing and approval process requires substantial time, effort and financial resources and we cannot be certain that any approvals for our drug candidates, or any future drug candidates we may develop, will be granted on a timely basis, if at all.

Once a drug candidate is identified for development, it enters the non-clinical testing stage. Non-clinical tests include laboratory evaluations of product chemistry, toxicity, formulation and stability, as well as preclinical studies. An IND sponsor must submit the results of the non-clinical tests, together with manufacturing information, analytical data and any available clinical data or literature, to the FDA as part of the IND prior to commencing any testing in humans. An IND sponsor must also include a protocol detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated if the initial clinical trial lends itself to an efficacy evaluation. Some non-clinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions related to a proposed clinical trial and places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns or non-compliance, and may be imposed on all products within a certain class of products. The FDA also can impose partial clinical holds, for example, prohibiting the initiation of clinical trials for certain duration or for certain doses.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with cGCP regulations. These regulations include the requirement that all research subjects provide informed consent in writing before their participation in any clinical trial. Further, an IRB representing each institution participating in a clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review and reapprove the study at least annually. An IRB is responsible for protecting the rights of clinical trial subjects and considers, among other things, whether the risks to individuals participating in the clinical trial are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the clinical trial and the consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Each new clinical protocol and any amendments to the protocol must be submitted to the FDA for review, and to the IRBs for approval. Protocol detail, among other things, includes the objectives of the clinical trial, testing procedures, sublease selection and exclusion criteria, and the parameters to be used to monitor subject safety.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- **Phase 1.** Phase 1 includes the initial introduction of an investigational new drug into humans. These studies are closely monitored and may be conducted in patients, but are usually conducted in healthy volunteer subjects. These studies are designed to determine the metabolic and pharmacologic actions of the drug in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness. During Phase 1, sufficient information about the drug's pharmacokinetics and pharmacological effects should be obtained to permit the design of well-controlled, scientifically valid, Phase 2 studies. Phase 1 studies also evaluate drug metabolism, structure-activity relationships, and the mechanism of action in humans. These studies also determine which investigational drugs are used as research tools to explore biological phenomena or disease processes. The total number of subjects included in Phase 1 studies varies with the drug, but is generally in the range of twenty to eighty.

- **Phase 2.** Phase 2 includes the early controlled clinical studies conducted to obtain some preliminary data on the effectiveness of the drug for a particular indication or indications in patients with the disease or condition. This phase of testing also helps determine the common short-term side effects and risks associated with the drug. Phase 2 studies are typically well-controlled, closely monitored, and conducted in a relatively small number of patients, usually involving several hundred people.
- **Phase 3.** Phase 3 studies are expanded controlled and uncontrolled trials. They are performed after preliminary evidence suggesting effectiveness of the drug has been obtained in Phase 2, and are intended to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug. Phase 3 studies are designed to provide an adequate basis for extrapolating the results to the general population and transmitting that information in the physician labeling. Phase 3 studies usually include several hundred to several thousand people.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and clinical investigators within 15 calendar days for serious and unexpected suspected adverse events, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator's brochure, or any findings from other studies or animal or in vitro testing that suggest a significant risk in humans exposed to the drug candidate. Additionally, a sponsor must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction no later than 7 calendar days after the sponsor's receipt of the information. There is no assurance that Phase 1, Phase 2 and Phase 3 testing can be completed successfully within any specified period, or at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product has been associated with unexpected serious harm to subjects.

Concurrent with clinical trials, companies usually complete additional preclinical studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product drug and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product drug does not undergo unacceptable deterioration over its shelf life.

The results of product development, non-clinical studies and clinical trials, together with other detailed information regarding the manufacturing process, analytical tests conducted on the product, proposed labeling and other relevant information, are submitted to the FDA as part of an NDA requesting approval to market the new drug. The FDA reviews all NDAs submitted within 60 days of submission to ensure that they are sufficiently complete for substantive review before it accepts them for filing. If the submission is accepted for filing, the FDA begins an in-depth substantive review.

The approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive, and the FDA may interpret data differently than we interpret the same data. The FDA will issue a complete response letter if the agency decides not to approve the NDA in its present form. The complete response letter usually describes all of the specific deficiencies that the FDA identified in the NDA that must be satisfactorily addressed before it can be approved. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application or request an opportunity for a hearing.

If after such review a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. Any products for which we receive the FDA approval would be subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with the FDA promotion and advertising requirements. In addition, the FDA may require post-approval studies, including Phase 4 clinical trials, to further assess a product's safety and effectiveness after NDA approval and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized. The FDA also may conclude that an NDA may only be approved with a Risk Evaluation and Mitigation Strategy designed to mitigate risks through, for example, a medication guide, physician communication plan, or other elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

Post-Approval Requirements

Any products for which we receive the FDA approval are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with the FDA promotion and advertising requirements. The FDA strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. Further, manufacturers must continue to comply with cGMP requirements, which are extensive and require considerable time, resources and ongoing investment to ensure compliance. In addition, changes to the manufacturing process generally require prior the FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further the FDA review and approval.

The FDA may withdraw a product approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product's marketing or even complete withdrawal of the product from the market. Further, the failure to maintain compliance with regulatory requirements may result in administrative or judicial actions, such as fines, untitled or warning letters, holds on clinical trials, product seizures, product detention or refusal to permit the import or export of products, refusal to approve pending applications or supplements, restrictions on marketing or manufacturing, injunctions or consent decrees, or civil or criminal penalties, or may lead to voluntary product recalls.

Patent Term Restoration and Marketing Exclusivity

Because drug approval can take an extended period of time, there may be limited remaining life for the patents covering the approved drug, meaning that the company has limited time to use the patents to protect the sponsor's exclusive rights to make, use and sell that drug. In such a case, U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date.

In addition, the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application ("ANDA") or a 505(b)(2) Application submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval.

In the future, if appropriate, we intend to apply for restorations of patent term and/or marketing exclusivity for some of our products; however, there can be no assurance that any such extension or exclusivity will be granted to us.

Disclosure of Clinical Trial Information

Sponsors of clinical trials of the FDA-regulated products, including drugs are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Pharmaceutical Coverage, Pricing and Reimbursement

Much of the revenue generated by new Regulated Products depends on the willingness of third-party payors to reimburse the price of the product. Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. In the United States, sales of any products for which we may receive regulatory approval for commercial sale will depend in part on the availability of coverage and reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list, or formulary, which is not required to include all of the FDA-approved products for a particular indication. Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost- effectiveness of medical products and services, in addition to their safety and efficacy. To obtain coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of any products, in addition to the costs required to obtain regulatory approvals. Our product candidates may not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

The U.S. government and state legislatures have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. Adoption of government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Unfavorable coverage or reimbursement policies regarding any of the Company's products would have a material adverse impact on the value of that product.

Other Healthcare Laws and Compliance Requirements

If we obtain regulatory approval of our products, we may be subject to various federal and state laws targeting fraud and abuse in the healthcare industry. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business.

Patient Protection and the Affordable Care Act

The Affordable Care Act, enacted in March 2010, includes measures that have or will significantly change the way health care is financed in the United States by both governmental and private insurers. Among the provisions of the Affordable Care Act of greatest importance to the pharmaceutical industry are the following:

- The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. The Affordable Care Act increased pharmaceutical manufacturers' rebate liability on most branded prescription drugs from 15.1% of the average manufacturer price to 23.1% of the average manufacturer price, added a new rebate calculation for line extensions of solid oral dosage forms of branded products, and modified the statutory definition of average manufacturer price. The Affordable Care Act also expanded the universe of Medicaid utilization subject to drug rebates by requiring pharmaceutical manufacturers to pay rebates on Medicaid managed care utilization and expanding the population potentially eligible for Medicaid drug benefits.
- In order for a pharmaceutical product to receive federal reimbursement under the Medicare Part B and Medicaid programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The Affordable Care Act expanded the types of entities eligible to receive discounted 340B pricing.
- The Affordable Care Act imposed a requirement on manufacturers of branded drugs to provide a 50% discount off the negotiated price of branded drugs dispensed to Medicare Part D patients in the coverage gap (i.e., the "donut hole").

- The Affordable Care Act imposed an annual, non-deductible fee on any entity that manufactures or imports certain branded prescription drugs, apportioned among these entities according to their market share in certain government healthcare programs, although this fee does not apply to sales of certain products approved exclusively for orphan indications.

In addition to these provisions, the Affordable Care Act established a number of bodies whose work may have a future impact on the market for certain pharmaceutical products. These include the Patient-Centered Outcomes Research Institute, established to oversee, identify priorities in, and conduct comparative clinical effectiveness research, the Independent Payment Advisory Board, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program, and the Center for Medicare and Medicaid Innovation within the Centers for Medicare and Medicaid Services, to test innovative payment and service delivery models to lower Medicare and Medicaid spending.

These and other laws may result in additional reductions in healthcare funding, which could have a material adverse effect on customers for our product candidates, if we gain approval for any of them. Although we cannot predict the full effect on our business of the implementation of existing legislation or the enactment of additional legislation pursuant to healthcare and other legislative reform, we believe that legislation or regulations that would reduce reimbursement for, or restrict coverage of, our products could adversely affect how much or under what circumstances healthcare providers will use our product candidates if we gain approval for any of them.

U.S. Medical Device Regulatory Approval Process

Medical Devices are subject to different forms of testing and approval, and require satisfaction of various FDA requirements including the Food, Drug and Cosmetic Act (FDCA) in order to be brought to market.

The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval. The type of marketing authorization is generally linked to the classification of the device. The FDA classifies medical devices into one of three classes — Class I, Class II or Class III — based on the degree of risk the FDA determines to be associated with a device and the level of regulatory control deemed necessary to ensure the device's safety and effectiveness. Devices requiring fewer controls because they are deemed to pose lower risk are placed in Class I or II. Class I devices are deemed to pose the least risk and are subject only to general controls applicable to all devices, such as requirements for device labeling, premarket notification, and adherence to the FDA's Good Manufacturing Practices. Class II devices are intermediate risk devices that are subject to general controls and may also be subject to special controls such as performance standards, product-specific guidance documents, special labeling requirements, patient registries, or post-market surveillance. Class III devices are those for which insufficient information exists to assure safety and effectiveness solely through general controls or if the device is a life-sustaining, life-supporting or a device of substantial importance in preventing impairment of human health, or which presents a potential, unreasonable risk of illness or injury and special controls are not adequate to assure safety and effectiveness.

Most Class I devices and some Class II devices are exempted by regulation from the 510(k) clearance requirement and can be marketed without prior authorization from the FDA. Most Class II devices (and certain Class I devices that are not exempt) are eligible for marketing through the 510(k) clearance pathway. By contrast, devices placed in Class III generally require premarket approval or 510(k) de novo clearance prior to commercial marketing. The premarket approval process is more stringent, time-consuming, and expensive than the 510(k) clearance process. However, the 510(k) clearance process has also become increasingly stringent and expensive.

510(k) Clearance Pathway. When a 510(k) clearance is required, a premarket notification must be submitted to the FDA demonstrating that a proposed device is “substantially equivalent” to a previously cleared and legally marketed 510(k) device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for the submission of a premarket approval application, which is commonly known as the “predicate device.” A device is substantially equivalent if, with respect to the predicate device, it has the same intended use and has either (i) the same technological characteristics or (ii) different technological characteristics and the information submitted demonstrates that the device is as safe and effective as a legally marketed device and does not raise different questions of safety or effectiveness. By law, the FDA is required to clear or deny a 510(k) premarket notification within 90 days of submission of the application. As a practical matter, clearance often takes significantly longer. The FDA may require further information, including clinical data, to make a determination regarding substantial equivalence. If the FDA determines that the device, or its intended use, is not substantially equivalent to a previously-cleared device or use, the FDA will issue a not substantially equivalent decision. This means the device cannot be cleared through the 510k process and will require marketing authorization through the premarket approval pathway.

Premarket Approval Pathway. A premarket approval application must be submitted to the FDA if the device cannot be cleared through the 510(k) process. The premarket approval application process is much more demanding than the 510(k) premarket notification process and requires the payment of significant user fees. A premarket approval application must be supported by valid scientific evidence, which typically requires extensive data, including but not limited to technical, preclinical, clinical trials, manufacturing and labeling to demonstrate to the FDA's satisfaction reasonable evidence of safety and effectiveness of the device. The FDA has 45 days from its receipt of a premarket approval application to determine whether the application will be accepted for filing based on the FDA's threshold determination that it is sufficiently complete to permit substantive review. After the FDA determines that the application is sufficiently complete to permit a substantive review, the FDA will accept the application and begin its in-depth review. The FDA has 180 days to review an "accepted" premarket approval application, although this process typically takes significantly longer and may require several years to complete. During this review period, the FDA may request additional information or clarification of the information already provided. Also, an advisory panel of experts from outside the FDA may be convened to review and evaluate the application and provide recommendations to the FDA as to the approvability of the device. In addition, the FDA will conduct a preapproval inspection of the manufacturing facility to ensure compliance with quality system regulations. The FDA may delay, limit or deny approval of a premarket approval application for many reasons, including:

- failure of the applicant to demonstrate that there is reasonable assurance that the medical device is safe or effective under the conditions of use prescribed, recommended or suggested in the proposed labeling;
- insufficient data from the preclinical studies and clinical trials;
- the manufacturing processes, methods, controls or facilities used for the manufacture, processing, packing or installation of the device do not meet applicable requirements. If the FDA evaluations of both the premarket approval application and the manufacturing facilities are favorable, the FDA will either issue an approval order or an approvable letter, which usually contains a number of conditions that must be met in order to secure final approval of the premarket approval application. If the FDA's evaluation of the premarket approval application or manufacturing facilities is not favorable, the FDA will deny approval of the premarket approval application or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the premarket approval application. The FDA may also determine that additional clinical trials are necessary, in which case the premarket approval application may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the premarket approval application. Once granted, a premarket approval application may be withdrawn by the FDA if compliance with post approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

Clinical Trials. Clinical trials are almost always required to support premarket approval and are sometimes required for 510(k) clearance. In the United States, these trials generally require submission of an application for an Investigational Device Exemption, or IDE, to the FDA. The IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing it is safe to test the device in humans and that the testing protocol is scientifically sound. The FDA must approve the IDE in advance of trials for a specific number of patients unless the product is deemed a non-significant risk device eligible for more abbreviated IDE requirements or the clinical investigation is exempt from the IDE regulations. Clinical trials for significant risk devices may not begin until the IDE application is approved by the FDA and the appropriate institutional review boards, or IRBs, at the clinical trial sites. The applicant, the FDA or the IRB at each site at which a clinical trial is being performed may suspend a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the benefits. Even if a trial is completed, the results of clinical testing may not demonstrate the safety and efficacy of the device, may be equivocal or may otherwise not be sufficient to obtain approval or clearance of the product.

Both the 510(k) and premarket approval processes can be expensive and lengthy and require the payment of significant fees, unless an exemption applies. The FDA's 510(k) clearance process usually takes from approximately three to 12 months, but may take longer. The process of obtaining a premarket approval is much more costly and uncertain than the 510(k) clearance process and generally takes from approximately one to five years, or longer, from the time the application is submitted to the FDA until an approval is obtained. The process of obtaining regulatory clearances or approvals to market a medical device can be costly and time consuming, and the applicant may not be able to obtain these clearances or approvals on a timely basis, if at all.

As of the date of this annual report, our sole device candidate currently under development is SLS-1, which is a platform for the dexterous manipulation of cardiovascular robotic surgical catheter, conventionally classified as a cardiovascular steerable catheter, in the MRI environment. We do not currently have a commercialization timeline for SLS-1 and cannot assure you that SLS-1 will ever be ready for commercialization. If we are ready to seek regulatory approval for the SLS-1 device in the U.S., we expect that the FDA will classify it as a Class II non-exempted device requiring premarket clearance under Section 510(k) of the FDCA. If our device cannot clear through the 510(k) process, we will need to obtain marketing authorization through the premarket approval pathway, which will be more costly, lengthy and uncertain.

European Union Regulation

Regulation in the European Union

The process governing approval of medicinal products in the EU generally follows the same lines as in the United States. It entails satisfactory completion of pharmaceutical development, non-clinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the medicinal product for each proposed indication. It also requires the submission to relevant competent authorities for clinical trials authorization and to the European Medicines Authority, or EMA, for a marketing authorization application, or MAA, and granting of a marketing authorization by these authorities before the product can be marketed and sold in the EU.

Clinical Trial Approval

Pursuant to the currently applicable Clinical Trials Directive 2001/20/EC and the Directive 2005/28/EC on cGCP, a system for the approval of clinical trials in the EU (the equivalent of the IND process in the United States) has been implemented through national legislation of the EU member states. Under this system, an applicant must obtain approval from the competent national authority of an EU member state in which the clinical trial is to be conducted or in multiple EU member states if the clinical trial is to be conducted in a number of EU member states. Furthermore, the applicant may only start a clinical trial at a specific study site after the independent ethics committee has issued a favorable opinion. The clinical trial application, or CTA, must be accompanied by an investigational medicinal product dossier with supporting information prescribed by Directive 2001/20/EC and Directive 2005/28/EC and corresponding national laws of the EU member states and further detailed in applicable guidance documents.

In April 2014, the EU adopted a new Clinical Trials Regulation (EU) No 536/2014, which is set to replace the current Clinical Trials Directive 2001/20/EC. It is expected that the new Clinical Trials Regulation will apply in 2019. It will overhaul the current system of approvals for clinical trials in the EU. Specifically, the new regulation, which will be directly applicable in all EU member states, aims at simplifying and streamlining the approval of clinical trials in the EU. For instance, the new Clinical Trials Regulation provides for a streamlined application procedure using a single entry point and strictly defined deadlines for the assessment of clinical trial applications.

Marketing Authorization

To obtain a marketing authorization for a product under the EU regulatory system (the equivalent of the NDA process in the United States), an applicant must submit an MAA, either under a centralized procedure administered by the EMA or one of the procedures administered by competent authorities in EU member states (decentralized procedure, national procedure, or mutual recognition procedure). A marketing authorization may be granted only to an applicant established in the EU. Regulation (EC) No. 1901/2006 provides that prior to obtaining a marketing authorization in the EU, an applicant must demonstrate compliance with all measures included in an EMA-approved Pediatric Investigation Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted a product-specific waiver, class waiver, or a deferral for one or more of the measures included in the PIP.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all EU member states. Pursuant to Regulation (EC) No. 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy products and products with a new active substance indicated for the treatment of certain diseases, including products for the treatment of cancer. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or the CHMP, established by the EMA is responsible for conducting the assessment of a product to define its risk/benefit profile. Under the centralized procedure, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated evaluation may be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and, in particular, from the viewpoint of therapeutic innovation.

If the CHMP accepts such a request, the time limit of 210 days will be reduced to 150 days, but it is possible that the CHMP may revert to the standard time limit for the centralized procedure if it determines that it is no longer appropriate to conduct an accelerated assessment.

Periods of Authorization and Renewals

A marketing authorization is valid for five years, in principle, and it may be renewed after five years on the basis of a reevaluation of the risk benefit balance by the EMA or by the competent authority of the authorizing Member State. To that end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal period. Any authorization that is not followed by the placement of the drug on the EU market (in the case of the centralized procedure) or on the market of the authorizing Member State within three years after authorization ceases to be valid.

Regulatory Requirements after Marketing Authorization

Following approval, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of the medicinal product. These include compliance with the EU's stringent pharmacovigilance or safety reporting rules, pursuant to which post-authorization studies and additional monitoring obligations can be imposed. In addition, the manufacturing of authorized products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the EMA's cGMP requirements and comparable requirements of other regulatory bodies in the EU, which mandate the methods, facilities and controls used in manufacturing, processing and packing of drugs to assure their safety and identity. Finally, the marketing and promotion of authorized products, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the EU under Directive 2001/83EC, as amended.

Orphan Drug Designation and Exclusivity

Regulation (EC) No. 141/2000 and Regulation (EC) No. 847/2000 provide that a product can be designated as an orphan drug by the European Commission if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of (1) a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the EU when the application is made, or (2) a life-threatening, seriously debilitating or serious and chronic condition in the EU and that without incentives it is unlikely that the marketing of the drug in the EU would generate sufficient return to justify the necessary investment. For either of these conditions, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention, or treatment of the condition in question that has been authorized in the EU or, if such method exists, the drug has to be of significant benefit compared to products available for the condition.

An orphan drug designation provides a number of benefits, including fee reductions, regulatory assistance and the possibility to apply for a centralized EU marketing authorization. Marketing authorization for an orphan drug leads to a ten-year period of market exclusivity. During this market exclusivity period, neither the EMA nor the European Commission or the EU member states can accept an application or grant a marketing authorization for a "similar medicinal product." A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. The market exclusivity period for the authorized therapeutic indication may, however, be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan drug designation because, for example, the product is sufficiently profitable not to justify market exclusivity.

European Medical Device Regulatory Approval Process

Similar to the United States, there is a separate regulatory framework for approval of medical devices. If the Company determines to commercialize SLS-1 or another medical device, it will become subject to all of the requirements for approval required by those regulations.

PRC Regulation

In order to protect our potential market in the PRC, we have obtained an exclusive license of certain PRC patents directed to certain of the drug candidates that we are developing and are currently seeking approval of additional patent and other IP filings in the PRC. We do not otherwise conduct business in the PRC. Seeking IP approval in the PRC subjects us to some of the rules and practices of the PRC government. Since the Company intends eventually to market its products in the PRC, at least some of our drug candidates may become subject to regulatory approval and marketing authorization in the PRC.

Hong Kong Regulation

The operations of AML Clinic in Hong Kong are subject to certain general laws and regulations in relation to clinic medical professionals, trade description and safety of consumer goods, medical advertisement and importation, exportation, dealing in and sale of pharmaceutical products and drugs.

Medical Clinics Ordinance

The Medical Clinics Ordinance provides for the registration, control and inspection of medical clinics. It requires a medical clinic to be registered, with name and address and other prescribed particulars. "Medical clinic" means any premises used or intended to be used for the medical diagnosis or treatment of persons suffering from, or believed to be suffering from, any disease, injury or disability of mind or body, with specific exceptions, including private consulting rooms used exclusively by registered medical practitioners in the course of their practice on their own account and not bearing any title or description which includes the word "clinic" or "polyclinic" in the English language.

The application of registration may be refused if:

- (i) the income derived or to be derived from the establishment or operation of the clinic is not, or will not be, applied solely towards the promotion of the objects of the clinic; or
- (ii) any portion of such income, except payment of remuneration to employed registered medical practitioners, nurses and menial servants, will be paid by way of dividend, bonus or otherwise howsoever by way of profit to the applicant himself, or to any persons properly so employed, or to any other persons howsoever.

We do not believe that the Medical Clinic Ordinance is applicable to the business of our Company and its subsidiaries, having considered, among others, the following:

- (iii) the legislative intent behind the Medical Clinics Ordinance was to provide for registration of non-profit making clinics;
- (iv) the Food and Health Bureau of Hong Kong published a consultation document, "Regulation of Private Healthcare Facilities" in 2014 which specifically states that the Medical Clinics Ordinance and the Code of Practice For Clinics Registered Under The Medical Clinics Ordinance (Chapter 343 of the Laws of Hong Kong) set out the regulatory framework for non-profit-making medical clinics and that other private healthcare facilities, such as ambulatory medical centers and clinics operated by medical groups or individual medical practitioners, are not subject to direct statutory control beyond the regulation of an individual's professional practice; and
- (v) our business is one which makes and intends to continue making profit as a listed entity. The payment of bonuses to some of our Hong Kong Doctors is clearly a reflection of the profit-making nature of our business.

Hence, we do not believe that AML Clinic is required to be registered under the Medical Clinics Ordinance.

Waste Disposal Ordinance

The Waste Disposal Ordinance (Chapter 354 of the Laws of Hong Kong) (“WDO”) and the Waste Disposal (Clinical Waste) (General) Regulation (Chapter 354O of the Laws of Hong Kong) (the “WDR”) provide for, among others, the control and regulation of the production, storage, collection and disposal of clinical waste.

Under the WDO, clinical waste means waste consisting of any substance, matter or thing generated in connection with:

- a dental, medical, nursing or veterinary practice;
- any other practice, or establishment (howsoever described), that provides medical care and services for the sick, injured, infirm or those who require medical treatment;
- dental, medical, nursing, veterinary, pathological or pharmaceutical research; or
- a dental, medical, veterinary or pathological laboratory practice,

and which consists wholly or partly of any of the materials specified in one or more of the groups listed below:

- used or contaminated sharps;
- laboratory waste;
- human and animal tissues;
- infectious materials;
- dressings; and
- such other wastes as specified by the Director of the Environmental Protection Department (“EPD”) of Hong Kong.

Given the medical services provided by AML Clinic and the research works in our R&D Center may produce used or contaminated sharps such as syringes and needles as well as dressings, we are subject to WDO, WDR and the Code of Practice.

Public Health and Municipal Services Ordinance

We intend to market DOI (NLS-2) in Hong Kong. In Hong Kong, dietary supplements are defined as “health food” products. “Health food” containing medicines are subject to the Pharmacy and Poisons Ordinance (Cap 138) and such “health food” containing Chinese medicines are regulated by the Chinese Medicine Ordinance (Cap 549), where they must meet the requirements in respect of safety, quality and efficacy before they can be registered.

For other “health food” products which cannot be classified as Chinese medicine or western medicine are regulated under the Public Health and Municipal Services Ordinance (Cap 132) as general food products. The Public Health and Municipal Services Ordinance requires the manufacturers and sellers of food to ensure that their products are fit for human consumption and comply with the requirements in respect of food safety, food standards and labelling. In addition, all prepackaged food should bear labels which correctly list out the ingredients of the food under the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) under the Ordinance.

The DOI (NLS-2) is made with the bioactive ingredient extracted Chinese yam powder and does not contain any western or Chinese medicine; therefore, registration is not required under the local laws for marketing in Hong Kong. We will, however, ensure the compliance of the Food and Drugs (Composition and Labelling) Regulations (Cap 132W) with by proper labelling in place.

Rest of the World Regulation

For other countries in the world, the requirements governing the conduct of clinical trials, medical product licensing, pricing and reimbursement vary from country to country. In all cases if clinical trials are required, they must be conducted in accordance with cGCP requirements and the applicable regulatory requirements and the ethical principles having their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

C. Our Structure

See “Item 4. Information on the Company – A. History and Development of the Company.”

D. Property, plants and equipment

We have several operating leases, primarily for offices. Our principal executive offices are located in Hong Kong; we also have offices in London, Jersey City and New York.

Our facilities in Hong Kong consists of: (i) 638 square feet lab space under a lease that commenced in December 2017 and expires in December 2020, that carries a monthly rent of \$2,127 and which is used for the center run by APD (the “previous R&D Center”); (ii) 851 square feet office space under a lease that commenced in December 2017 and expires in December 2020 that carries a monthly rent of \$2,509, which is also used for the center run by APD (the “HKSTP Office Space”); (iii) 3,250 square feet office space under a lease that commenced in February 2018 and expires in January 2021 and that carries a monthly rent of \$16,667 (the “Guangdong Investment Tower Lease”) (See “Transactions with Related Persons – Leased Facilities”); and (iv) 3,173 square feet space under a lease that commenced in March 2018 and expires in March 2022 (the “AML Lease”, which is home to AML Clinic).

We have a 3,424 square feet space premise in Fo Tan, Hong Kong, which is currently under a lease and rented out to a third party, with a monthly rent of \$4,393, from October 2019 to September 2021.

In March 2020, Aptorum Therapeutics Limited leased a 2,021 square feet lab space that commenced in March 2020 and expires in March 2023, that carries a monthly rent of \$6,348 (the “new R&D Center”). The previous R&D Center will be expected to be terminated in second quarter of 2020.

Our office space in London consists of approximately 172 square feet under a lease that commenced in August 2019, expires in March 2020 and has a rent of \$2,715 per month, and renewed in April 2020, expires in November 2020 and has a rent of \$3,231 per month. Our office space in Jersey City consists of approximately 81 square feet under a lease that commenced in April 2019 and expired in February 2020 and has a rent of \$1,466 per month. Our office space in New York consists of approximately 95 square feet under a lease that commenced in February 2020, which will automatically renew until 1 month’s notice for termination, and has a rent of \$1,844 per month.

Payments under operating leases are expensed on a straight-line basis over the periods of the respective leases, and the terms of the leases do not contain rent escalation, contingent rent, and renewal or purchase options.

We believe our current facilities are sufficient to meet our needs.

Item 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

Item 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion of our financial condition and results of operations is based upon and should be read in conjunction with our consolidated financial statements and their related notes included in this annual report. This report contains forward-looking statements. See “Item 5. Operating and Financial Review and Prospects— G. Safe Harbor.” In evaluating our business, you should carefully consider the information provided under the caption “Item 3. Key Information—D. Risk Factors” in this annual report. We caution you that our businesses and financial performance are subject to substantial risks and uncertainties.

For purposes of Item 5, reference to the “We”, “Our”, “Ours” or “Group” means Aptorum Group Limited and all of its subsidiaries.

This annual report includes consolidated financial statements for the years ended December 31, 2019, 2018 and 2017. However, as permitted by Instruction 6 to Item 5 of Form 20-F, a discussion of the changes in our results of operations for the year ended December 31, 2018 and the period March 1, 2017 through December 31, 2017 has been omitted from this annual report, but may be found in “Item 5. Operating And Financial Review And Prospects” in our annual report on Form 20-F for the year ended December 31, 2018, filed with the SEC on April 15, 2019.

A. Operating Results**Overview**

We are a pharmaceutical company dedicated to developing and commercializing a broad range of therapeutic and diagnostic technologies to tackle unmet medical needs. We have obtained exclusive licenses for our technologies. In addition, we are also developing certain proprietary technologies as product candidates. We are pursuing therapeutic and diagnostic projects (including projects seeking to use extracts or derivatives from natural substances to treat diseases) in neurology, infectious diseases, gastroenterology, oncology and other disease areas. We also have projects focused on surgical robotics and dietary supplement. (See “Item 4. Information on the Company – B. Business Overview – Lead Projects and Other Projects under Development”) Also, we opened a medical clinic, AML Clinic, in June 2018.

Although none of our drug or non-therapeutics candidates has yet been approved for testing in humans, our goal is to develop a broad range of novel therapeutics and diagnostics across a wide range of disease/therapeutic areas. Key components of our strategy for achieving this goal include: (for details of our strategy, See “Item 4. Information on the Company – B. Business Overview – Our Strategy”)

- Developing therapeutic and diagnostic innovations across a wide range of disease/therapeutic areas;
- Selectively expanding our portfolio with potential products that may be able to attain orphan drug designation and/or satisfy current unmet medical needs;
- Collaborating with leading academic institutions and CROs;
- Expanding our in-house pharmaceutical development center;
- Leveraging our management’s expertise, experience and commercial networks;
- Strategically developing opportunities in Hong Kong to promote access to the PRC market; and
- Obtaining and leveraging government grants to fund project development.

We have begun to devote a significant percentage of our resources, including a substantial portion of the proceeds to two therapeutic projects (“Lead Projects”). The drug candidates being advanced as the Lead Projects are ALS-4 and SACT-1, described in further detail above. If the results of the remaining preclinical studies of these drug candidates are positive, we expect to be able to submit by the second half of 2020, subject to regulatory review, an Investigational New Drug Application (“IND”) for at least one of these candidates to the U.S. Food and Drug Administration (“FDA”) or an equivalent application to the regulatory authorities in one or more other jurisdictions such as the China’s National Medical Products Administration (“NMPA”) and/or the European Medicines Agency (“EMA”). Acceptance of these applications by the relevant regulatory authority would enable the Company to begin testing that drug candidate in humans in that jurisdiction. Our ability to obtain any approval of such applications is entirely dependent upon the results of our preclinical studies, none of which have yet been completed.

Based on our evaluation of preliminary data and our consideration of a number of factors including substantial unmet needs, benefits over existing therapies, potential market size, competition in market, the Company decides how to prioritize its resources among projects. Overall, our rationale for selecting Lead Projects is not based on any mechanical formula or rigid selection criteria, but instead focused on a combination of the factors and individual attributes of the Lead Projects themselves. See “Item 3. Key Information—D. Risk Factors—Risks Related to the Preclinical and Clinical Development of Our Drug Candidates—“Preclinical development is a long, expensive and uncertain process, and we may terminate one or more of our current preclinical development programs.” and “Management has discretion to terminate the development of any of our projects at any time.”

Our current business consists of “therapeutics” and “non-therapeutics” segments. However, our focus is on the therapeutics segments. Because of the risks, costs and extended development time required for successful drug development, we have determined to pursue projects within our non-therapeutics segments, such as AML Clinic, to provide some interim revenue and medical robots that may be brought to market and generate revenue more quickly.

Therapeutics Segment. In our therapeutics segment (“Aptorum Therapeutics Group”), we are currently seeking to develop various drug molecules (including projects seeking to use extracts or derivatives from natural substances to treat diseases) and certain technologies for the treatment (“therapeutics”) and diagnosis (“diagnostics”) of human disease conditions in neurology, infectious diseases, gastroenterology, oncology and other disease areas. In addition, we are seeking to identify additional prospects which may qualify for potential orphan drug designation (e.g., rare types of cancer) or which address other current unmet medical needs. Aptorum Therapeutics Group is operated through Aptorum’s wholly-owned subsidiary, Aptorum Therapeutics Limited, a Cayman Islands exempted company with limited liability, whose principal place of business is in Hong Kong and its indirect subsidiary companies (who we sometimes refer to herein as project companies), whose principal places of business are also in Hong Kong.

Non-Therapeutics Segment. The non-therapeutics segment ("Aptorum Non-Therapeutics Group") encompasses three businesses: (i) the development of surgical robotics and medical devices, (ii) AML Clinic and (iii) the sale of dietary supplement. The development of surgical robotics and medical devices business is operated through Signate Life Sciences Limited, a subsidiary of Aptorum Therapeutics Limited. The outpatient clinic is operated through our subsidiary, Aptorum Medical Limited. Effective as of March 2018, we leased office space in Central, Hong Kong as the home to our medical clinic ("AML Clinic"). AML Clinic commenced operations under the name of Talem Medical in June 2018. The estimated general administrative expenses and other operating expenses of AML Clinic is expected to be no more than USD120,000 per month. The clinic is expected to reach operating profit in 18 months from the clinic reaching its full operating capacity upon (i) the successful recruitment of a minimum of six full time physicians (AML Clinic currently has one full time physician and six part time physicians) and (ii) establishing steady patients flow via brand development. (See "Item 4. Information on the Company – B. Business Overview – Lead Projects, Dietary Supplement and Other Projects under Development – Other Projects under Development – Aptorum Medical Limited - AML Clinic") The sale of dietary supplement is operated through Nativus Life Sciences Limited ("Nativus"), a subsidiary of Aptorum Therapeutics Limited. As part of the commercialization, the Group, through Nativus, entered into a regional distribution and marketing agreement with Multipak Limited, a Hong Kong based group that operates household brands, including the Luk Yu® tea bag and other health related products. Through Multipak, the Group will be able to increase the accessibility of the product to a large consumer base regionally. The production of Aptorum Group's dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell™.

The Company has already obtained opportunities resulting in our existing licensing agreements from various contractual relationships that we have entered into, including service/consulting agreements with some of the world's leading specialists and clinicians in our areas of interest, with academic institutions and organizations, and with contract research organizations ("CROs"). We anticipate that these relationships will generate additional licensing opportunities in the future. In addition, we have established and are continuing to expand our in-house research facilities (collectively, the "R&D Center") to develop some of our drug and device candidates internally and to collaborate with third-party researchers.

The Bond Offering

On April 6, 2018, we entered into a subscription agreement (the "Bond Subscription Agreement") with Peace Range Limited ("Peace Range"), a company incorporated under the laws of the British Virgin Islands and wholly-owned special purpose vehicle of Adamas Ping An Opportunities Fund L.P. Adamas Ping An Opportunities Fund L.P. is the third fund from Adamas Asset Management (HK) Limited ("Adamas") and the first fund from the joint venture between Adamas and Yun Sheng Capital Company Limited, a subsidiary of Ping An Insurance (Group) Company of China, Limited and is advised by Ping An Capital Company Limited. Pursuant to the Bond Subscription Agreement, we issued Peace Range a \$15,000,000 convertible bond (the "Bond" and the "Bond Offering"), minus a structuring fee equal to 2% of the principal amount of the Bond, on April 25, 2018. We also agreed to pay certain expenses, up to an aggregate limit of \$250,000, incurred by Peace Range in connection with the Bond Offering. The closing of the transaction contemplated by the Bond Subscription Agreement and the issuance of the Bond are subject to standard closing conditions, which may be satisfied or waived by the impacted party. The Bond earns interest at the rate of 8% per annum, payable semi-annually. The payment of the Bond is guaranteed by our holding company, Jurchen Investment Corporation ("Jurchen"), a company wholly-owned by our CEO, Ian Huen (See "Item 7. Major Shareholders and Related Party Transactions – Share Transfer: Change in direct substantial shareholders of the Company"), pursuant to a deed of guarantee (the "Guarantee"). In addition, the repayment of the principal of the Bond and interest payables is secured by a fund we set aside in a debt service reserve account, with the funds in the debt service reserve account to be released in an amount pro rata to the principal amount of the Bond being converted. The Bond shall mature on the twelfth calendar month following the issuance date, or with prior written consent of the holders of the Bond, the business day falling six calendar months thereafter. 10% of the principal amount of the Bond automatically converted into our Class A Ordinary Shares following the IPO; the rest of the Bond is convertible at the option of the holder commencing on the closing of the IPO until the earlier of the date falling 12 calendar months after the maturity of the Bond and the date falling 12 calendar months after the closing of the IPO. We closed the Bond Offering on April 25, 2018 and issued a Bond to Peace Range pursuant to the Bond Subscription Agreement. Pursuant to the aforementioned conversion rights, we issued an aggregate of 119,217 shares of Class A Ordinary Shares to the Bond holder after the IPO closed. Following the IPO and pursuant to the terms of the related agreements, the shares Jurchen previously submitted to be held in escrow to guarantee the payment of the Bond were released to Jurchen and the related share charge agreement and escrow agreement were terminated.

On April 24, 2019, one of our wholly owned subsidiaries, Aptorum Investment Holding Ltd., repurchased the Bonds from Peace Range. According to the amended and restated terms and conditions of the Bonds, the Bondholder was granted certain rights to subscribe for additional ordinary shares of the Company, in an amount up to the principal amount of the Bonds at a price of US\$12.17 (subject to adjustment) on or before 7 days prior to the maturity date ("Subscription Right"). The total consideration of the repurchase of Bonds and the Subscription Rights was US\$13.6 million in cash, excluding accrued interest. The Bond matured and was redeemed on October 25, 2019.

One of the underwriters in the IPO also served as a placement agent for the Bond Offering and received (i) a cash success fee of \$600,000 and (ii) warrants to purchase 67,790 Class A Ordinary Shares, at an exercise price of \$12.17 per share, subject to adjustment (the "Bond PA Warrants"). The Bond PA Warrants are exercisable on a cashless basis. China Renaissance Securities (HK) Limited ("China Renaissance") also served as a placement agent for the Bond Offering; for such services, China Renaissance received a cash success fee of \$150,000. Prior to the commencement the IPO, Boustead assigned all such securities to a non-affiliate; the assignment is non-recourse. As of the date hereof, there are no outstanding Bond PA Warrants.

The Series A Note Offering

On May 15, 2018, we closed a private financing with certain investors (the "Series A Note Investors") who purchased an aggregate of approximately \$1,600,400 Series A convertible notes, at a purchase price of \$10,000 per note (the "Series A Notes"), pursuant to a note purchase agreement. Some of the Series A Note Investors are either affiliates of the Company or "related persons" as such term is defined in Item 404 of Regulation S-K (See "Item 7. Major Shareholders and Related Party Transactions"). We refer to this private placement transaction as the "Series A Note Offering." The Series A Note Investors entered into a lock-up agreement, pursuant to which they agreed not to sell or otherwise transfer or dispose the Series A Notes or the Class A Ordinary Shares underlying the Series A Notes during the six-month period commencing on the date our Class A Ordinary Shares commence trading on NASDAQ Global Market. The Series A Notes automatically converted into Class A Ordinary Shares at the closing of the IPO at a conversion price equal to a 56% discount to the actual price per Class A Ordinary Share ("Conversion Price"). Accordingly, the Series A Notes converted into, and we issued an aggregate of 230,252 shares of Class A Ordinary Shares after the IPO closed.

One of the underwriters in the IPO also served as a placement agent for the Series A Note Offering and received: (i) a cash success fee of \$68,516 and (ii) warrants to purchase 12,663 Class A Ordinary Shares, at an exercise price of \$6.95 per share, subject to adjustment (the "Series A Note PA Warrants"). The Series A Note PA Warrants are also exercisable on a cashless basis, at the holder's discretion. As of the date hereof, there are no outstanding Series A Note PA Warrants.

Registered Direct Offering

On February 28, 2020, we closed a Registered Direct Offering with certain non-affiliated institutional investors (the "Non-affiliated Purchasers") and Jurchen Investment Corporation, our largest shareholder and wholly owned by Mr. Ian Huen, our Chief Executive Officer (the "Affiliated Purchaser" collectively with the Non-affiliated Purchasers, the "Purchasers"). The Purchasers purchased an aggregate of 1,351,350 Class A Ordinary Shares and warrants ("Warrants") to purchase 1,351,350 Class A Ordinary Shares (the "Offering"), for gross proceeds of approximately \$10 million. The Warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. The purchase price for each Share and the corresponding Warrant is \$7.40.

We agreed that we would not issue any Class A Ordinary Shares (or Class A Ordinary Share Equivalents (as defined in the purchase agreement entered on February 25, 2020)) for 45 days following the closing of the Registered Direct Offering subject to certain customary exceptions, including, without limitation, issuances of restricted securities to consultants or employees of the Company, share option grants and issuances pursuant to existing outstanding securities and issuance in connection with strategic acquisition.

We agreed from the date of the purchase agreement until the date that is the later of (i) the 12 month anniversary of the closing date or (ii) one or more subsequent issuance by the Company or any of its subsidiaries of ordinary share equivalent having aggregate gross proceeds of at least \$20,000,000, the Purchasers shall have the right to participate in the subsequent financing up to an amount equal to 50% of the Subsequent Financing (the "Participation Maximum") on the same terms, conditions and price provided for in the Subsequent Financing.

We also agreed certain most favored nation treatment of the all the Purchasers pursuant to which each Purchaser will have the opportunity to automatically have the same benefit if the terms and conditions with respect to this Purchase Agreement or any securities offered therein the Company offered to the other Purchasers are more favorable.

Critical Accounting Policies, Estimates and Assumptions

Principles of presentation and consolidation

The consolidated financial statements are prepared in accordance with U.S. GAAP. Before March 1, 2017, the Company was an investment company under U.S. GAAP for the purposes of financial reporting. U.S. GAAP for an investment company requires investments to be recorded at estimated fair value and the unrealized gains and/or losses in an investment's fair value are recognized on a current basis in the statements of operations. In addition, the Company did not consolidate its subsidiaries, since they were operating companies and not investment companies. Such entities were fair valued in accordance with ASC Topic 946 ("ASC 946") and ASC Topic 820 ("ASC 820").

As of March 1, 2017, after the change of business purpose, legal form and substantive activities, the Company's status changed to an operating company from an investment company since it no longer met the criteria to qualify as an investment company under the ASC 946. The Company discontinued applying the guidance in ASC 946 and began to account for the change in status prospectively by accounting for its investments in accordance with other U.S. GAAP topics.

This change in status and the accounting policies affect the comparability of the financial statements. As such, for the period January 1, 2017 through February 28, 2017, statements of operations, changes in net assets, and cash flows have been presented on the predecessor basis of accounting as an investment company, and on the successor basis of accounting as an operating company since March 1, 2017. The consolidated balance sheets as of December 31, 2019 and 2018 have been presented on the successor basis.

The consolidated financial statements of the Group are presented on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and include the accounts of the Company, its direct and indirect wholly and majority owned subsidiaries. All material intercompany balances and transactions have been eliminated in preparation of the consolidated financial statements.

Use of estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets from operations as well as income and expenses during the reporting period. Significant accounting estimates reflected in the Group's consolidated financial statements include valuing equity securities, fair value of investments in securities, convertible debts and finance lease, the useful lives of intangible assets and equipment, impairment of long-lived assets, and collectability of receivables. Actual results could differ from those estimates.

Foreign currency translation and transaction

USD is the reporting currency. The functional currency of subsidiaries in the Cayman Islands, Seychelles, Samoa and the United States are USD, the functional currency of subsidiaries in Hong Kong is Hong Kong Dollars ("HKD"), the functional currency of a subsidiary in Macao is Macanese Pataca ("MOP"), the functional currency of a subsidiary in the United Kingdom is Great British Pound ("GBP"), and the functional currency of subsidiaries in Singapore is Singapore Dollars ("SGD"). An entity's functional currency is the currency of the primary economic environment in which it operates, normally that is the currency of the environment in which it primarily generates and expends cash. The management considered various indicators, such as cash flows, market expenses, financing and inter-company transactions and arrangements in determining the Group's functional currency.

In the consolidated financial statements, the financial information of the Company and its subsidiaries, which use HKD, MOP, GBP and SGD as their functional currency, has been translated into USD. Assets and liabilities are translated from each subsidiary's functional currency at the exchange rates on the balance sheet dates, equity amounts are translated at historical exchange rates, and revenues, expenses, gains, and losses are translated using the average exchange rates for the year. Translation adjustments are reported as cumulative translation adjustments and are shown as a separate component of other comprehensive income or loss in the statements of operations and comprehensive loss.

Fair value measurement

Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Group considers the principal or most advantageous market in which it would transact its business, and it considers assumptions that market participants would use when pricing the asset or liability.

As a basis for considering such assumptions, a three-tier fair value hierarchy prioritizes the inputs utilized in measuring fair value as follows:

- Level 1 applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.
- Level 2 applies to assets or liabilities for which there are inputs other than quoted prices included within Level 1 that are observable for the asset or liability such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.
- Level 3 applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

Impairment of long-lived assets

The Group reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable. When these events occur, the Group measures impairment by comparing the carrying value of the long-lived assets to the estimated undiscounted future cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, the Group would recognize an impairment loss, which is the excess of carrying amount over the fair value of the assets, using the expected future discounted cash flows.

Revenue recognition

Revenue is recognized when (or as) the Company satisfies performance obligations by transferring a promised goods or services to a customer. Revenue is measured at the transaction price which is based on the amount of consideration that the Company expects to receive in exchange for transferring the promised goods or services to the customer. Contracts with customers are comprised of invoices and written contracts. Revenue from healthcare services is measured upon the provision of the relevant services.

Income taxes

The Group accounts for income taxes under the asset and liability method. Under this method, deferred income taxes are determined based on differences between the financial carrying amounts of existing assets and liabilities and their tax bases. Income taxes are provided for in accordance with the laws of the relevant taxing authorities.

A valuation allowance is provided for deferred tax assets if it is more likely than not that these items will either expire before the Group is able to realize their benefits, or that future deductibility is uncertain. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

RESULTS OF OPERATION

Financial statements and information are presented for the years ended December 31, 2019 and 2018.

The following table summarizes our results of operations for the years ended December 31, 2019 and 2018.

	Year Ended December 31, 2019	Year Ended December 31, 2018
Revenue		
Healthcare service income	\$ 535,166	\$ 383,450
Operating expenses		
Cost of healthcare service	(794,545)	(318,011)
Research and development expenses	(6,939,051)	(3,101,432)
General and administrative fees	(7,373,425)	(4,919,626)
Legal and professional fees	(3,405,705)	(1,811,770)
Other operating expenses	(220,891)	(560,709)
Total expenses	<u>(18,733,617)</u>	<u>(10,711,548)</u>
Other (loss) income		
(Loss) gain on investments in marketable securities, net	(81,839)	501,522
Gain on non-marketable investments	1,147,190	-
Gain (loss) on investments in derivatives, net	87,599	(974,444)
Gain on use of digital currencies	46,717	-
Gain on extinguishment of convertible debts	1,198,490	-
Changes in fair value of warrant liabilities	(866,300)	124,726
Interest expense, net	(3,699,672)	(4,458,191)
Rental income	16,868	-
Sundry income	232,460	-
Total other loss, net	<u>(1,918,487)</u>	<u>(4,806,387)</u>
Net loss	<u>(20,116,938)</u>	<u>(15,134,485)</u>

Impact of COVID-19 Outbreak

On January 30, 2020, the World Health Organization declared the coronavirus outbreak a “Public Health Emergency of International Concern” and on March 10, 2020, declared it to be a pandemic. Actions taken around the world to help mitigate the spread of the coronavirus include restrictions on travel, and quarantines in certain areas, and forced closures for certain types of public places and businesses. The coronavirus and actions taken to mitigate it have had and are expected to continue to have an adverse impact on the economies and financial markets of many countries, including the geographical area in which the Company operates. While the closures and limitations on movement, domestically and internationally, are expected to be temporary, if the outbreak continues on its current trajectory the duration of the supply chain disruption could reduce the availability, or result in delays, of materials or supplies to and from the Group, which in turn could materially interrupt the Group’s business operations. Given the speed and frequency of the continuously evolving developments with respect to this pandemic, the Group cannot reasonably estimate the magnitude of the impact to its consolidated results of operations. We have taken every precaution possible to ensure the safety of our employees.

Additionally, it is reasonably possible that estimates made in the financial statements have been, or will be, materially and adversely impacted in the near term as a result of these conditions, including losses on investments; impairment losses related to long-lived assets and current obligations.

Revenue

Healthcare service income was \$535,166 and \$383,450 for the years ended December 31, 2019 and 2018, which related to the service income derived from the AML clinic.

Research and development expenses

Research and development expenses comprised of costs incurred related to research and development activities, including payroll expenses to our research and development staff, sponsored research programs with various universities and research institutions and costs in acquiring IP rights which did not meet the criteria of capitalization under the U.S. GAAP. The following table sets forth a summary of our research and development expenses for the years ended December 31, 2019 and 2018. The increase in research and development expenses was mainly due to the increase in consultation service for projects.

	Year Ended December 31, 2019	Year Ended December 31, 2018
Research and Development Expenses:		
Payroll expenses	\$ 1,784,647	\$ 1,363,740
Sponsored research	1,403,689	796,943
Amortization and depreciation	873,239	437,453
Consultation	2,431,997	298,315
Other R&D expenses	445,479	174,981
Milestone payment	-	30,000
Total Research and Development Expenses	<u>6,939,051</u>	<u>3,101,432</u>

General and administrative fees

The following table sets forth a summary of our general and administrative expenses for the years ended December 31, 2019 and 2018. The increase in general and administration fees was mainly due to the issuance of share options to our directors, employees, external consultants and advisors in 2019 for motivation.

	Year Ended December 31, 2019	Year Ended December 31, 2018
General and Administrative Fees:		
Administrative fees	\$ -	\$ 448,718
Payroll expenses	4,329,039	2,510,331
Rent and rates	490,975	681,502
Travelling expenses	797,446	414,696
Amortization and depreciation	426,378	244,839
Insurance	620,312	199,698
Advertising and marketing expenses	316,227	125,388
Other expenses	393,048	294,454
Total General and Administrative Fees	<u>7,373,425</u>	<u>4,919,626</u>

Legal and professional fees

For the years ended December 31, 2019 and 2018, the legal and professional fees were \$3,405,705 and \$1,811,770, respectively. The increase in legal and professional fees was mainly due to the increased business consultant services engaged in 2019 and the increased in token related expenses.

Other operating expenses

The following table sets forth a summary of our other operating expenses for the years ended December 31, 2019 and 2018. The decrease in other operating expenses was mainly due to less corporate events held to promote the Company in 2019.

	Year Ended December 31, 2019	Year Ended December 31, 2018
Other Operating Expenses:		
Event and meeting expenses	\$ 93,382	\$ 385,483
Commission expenses	2,761	1,517
Other expenses	124,748	173,709
Total Other Operating Expenses	<u>220,891</u>	<u>560,709</u>

Other (loss) income

The following table sets forth a summary of our other (loss) income for the years ended December 31, 2019 and 2018. The interest expense, net, was mainly related the convertible debts which were fully repaid in 2019.

	Year Ended December 31, 2019	Year Ended December 31, 2018
Other (loss) income:		
(Loss) gain on investments in marketable securities, net	\$ (81,839)	\$ 501,522
Gain on non-marketable investments	1,147,190	-
Gain (loss) on investments in derivatives, net	87,599	(974,444)
Gain on use of digital currencies	46,717	-
Gain on extinguishment of convertible debts	1,198,490	-
Changes in fair value of warrant liabilities	(866,300)	124,726
Interest expense, net	(3,699,672)	(4,458,191)
Rental income	16,868	-
Sundry income	232,460	-
Total other loss, net	<u>(1,918,487)</u>	<u>(4,806,387)</u>

Net loss attributable to Aptorum Group Limited

For the years ended December 31, 2019 and 2018, net loss attributable to Aptorum Group Limited (excluding net loss attributable to non-controlling interests) was \$18,686,762 and \$14,831,723, respectively.

LIQUIDITY AND CAPITAL RESOURCES

The Company reported a net loss of \$20,116,938, net operating cash outflow of \$13,382,633 and working capital of \$5,358,206 for the year ended December 31, 2019. In addition, the Company had an accumulated deficit of \$37,555,980 as of December 31, 2019. The Company's operating results for future periods are subject to numerous uncertainties and it is uncertain if the Company will be able to reduce or eliminate its net losses for the foreseeable future. If management is not able to generate significant revenues from its product candidates currently in development, the Company may not be able to achieve profitability.

The Company's principal sources of liquidity have been cash, marketable securities and line of credit facility from related parties. As of the date of issuance of the consolidated financial statements, the Company has approximately \$6.3 million of restricted and unrestricted cash and undrawn line of credit facility from related parties of approximately \$12.4 million. Based upon the current market price of the Company's marketable securities, it anticipates it can liquidate such marketable securities, if necessary. In addition, the Company will need to maintain its operating costs at a level which will not exceed such aforementioned sources of funds in order to continue as a going concern for a period within one year after the issuance of its consolidated financial statements.

The Company believes that available cash, together with the efforts from aforementioned management plan and actions, should enable the Company to meet current anticipated cash needs for at least the next 12 months after the date that the financial statements are issued and the Company has prepared the consolidated financial statements on a going concern basis. However, the Company continues to have ongoing obligations and it expects that it will require additional capital in order to execute its longer-term development plan. If the Company encounters unforeseen circumstances that place constraints on its capital resources, management will be required to take various measures to conserve liquidity, which could include, but not necessarily be limited to, deferring some of its research, seeking to dispose of marketable securities and drawing down from line of credit provided by related parties. Management cannot provide any assurance that the Company will raise additional capital if needed.

CONDENSED SUMMARY OF OUR CASH FLOWS

	Year Ended December 31, 2019	Year Ended December 31, 2018
Net cash used in operating activities	\$ (13,382,633)	\$ (10,035,531)
Net cash used in investing activities	(108,061)	(6,061,987)
Net cash (used in) provided by financing activities	(7,323,371)	25,478,949
Net (decrease) increase in cash and restricted cash	<u>(20,814,065)</u>	<u>9,381,431</u>

Operating activities

Net cash used in operating activities amounted to \$13.4 million and \$10.0 million for the years ended December 31, 2019 and 2018. The increase in net cash used in operating activities is mainly due to our increased net loss by \$5.0 million, partly offset by the increase in non-cash share-based compensation by \$1.6 million.

Investing activities

Net cash used in investing activities amounted to \$0.1 million and \$6.1 million for the years ended December 31, 2019 and 2018. The decrease in net cash used in investing activities is mainly due to the decrease in purchases of property, plant and equipment by \$4.8 million and increase in proceeds from sales of investment securities by \$1.0 million.

Financing activities

Net cash used in financing activities amounted to \$7.3 million for the year ended December 31, 2019. Net cash provided by financing activities amounted to \$25.5 million for the year ended December 31, 2018. It changed from net cash provided by financing activities to net cash used in financing activities is due to the payment for settlement of convertible debts of \$13.6 million, and decrease in proceeds from issuance of convertible debts and shares by \$16.1 million and \$11.1 million respectively. It is partly offset by the increase in loan from related parties by \$6.3 million.

CAPITAL EXPENDITURES

Our capital expenditures were \$0.9 million and \$6.0 million for the years ended December 31, 2019 and 2018, respectively. These capital expenditures were incurred primarily for investments in facilities, leasehold improvements, equipment and technology.

RECENT ACCOUNTING PRONOUNCEMENTS

Recently adopted accounting pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606) (“ASU 2014-09”), which was subsequently modified in August 2015 by ASU 2015-14, Revenue from Contracts with Customers: Deferral of the Effective Date. The Group adopted this standard effective January 1, 2019 using the modified retrospective approach, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. The adoption does not have a material impact to the consolidated financial statements.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01 (“ASU 2016-01”) “Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities,” which amends various aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The Group adopted ASU 2016-01 as of January 1, 2019 using the modified retrospective method for marketable equity securities and the prospective method for non-marketable equity securities. The following table summarizes the changes to the consolidated balance sheet for the adoption of ASU 2016-01:

	December 31, 2018	Adjustment due to ASU 2016-01	January 1, 2019
Accumulated deficit	\$ (17,379,185)	\$ (1,490,033)	\$ (18,869,218)
Accumulated other comprehensive loss	\$ (1,484,688)	\$ 1,490,033	\$ 5,345

The Group has elected to use the measurement alternative for non-marketable equity securities, defined as cost adjusted for changes from observable transactions for identical or similar investments of the same issuer, less impairment. The adoption of ASU 2016-01 increases the volatility of other income (expense), net, as a result of the unrealized gain or loss from the remeasurement of equity securities.

Recently issued accounting standards which have not yet been adopted

The Group is an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2010 (the “JOBS Act”). Under the JOBS Act, the emerging growth companies (“EGCs”) can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses (“ASU 2016-13”). Subsequently, the FASB issued ASU 2019-05, Financial Instruments- Credit Losses (Topic 326): Targeted Transition Relief. The amendments in ASU 2016-13 update guidance on reporting credit losses for financial assets. These amendments affect loans, debt securities, accounts receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. The amendments are effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. As an EGC the Group can adopt the amendment for fiscal years beginning after December 15, 2021, and interim period within those fiscal years. The Group is currently evaluating the impact on its consolidated financial statements of adopting this standard.

In February 2016, the FASB issued ASU 2016-02, Leases (“ASU 2016-02”), which requires a lessee to recognize a right-of-use asset and a lease liability for operating leases, initially measured at the present value of the future lease payments, in the balance sheet. ASU 2016-02 also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This new guidance is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted. The Group has evaluated the potential effects of adopting the provisions of ASU 2016-02 on its consolidated financial statements. The Group has estimated that the operating lease right-of-use assets of \$959,641, and operating lease liabilities of \$982,288 will be recognized at January 1, 2020 in the consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement, which amends ASC 820, Fair Value Measurement. This ASU modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. The amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The removed and modified disclosures will be adopted on a retrospective basis and the new disclosures will be adopted on a prospective basis. The adoption will not have a material effect on the Group’s financial statements.

In December 2019, the FASB issued Accounting Standards Update No. 2019-12, Income Taxes (Topic 740): “Simplifying the Accounting for Income Taxes” (“ASU 2019-12”), which simplifies the accounting for income taxes. This standard will be effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years, on a prospective basis, and early adoption is permitted. The Group is currently evaluating the impact of the new standard on its consolidated financial statements.

The Group does not believe other recently issued but not yet effective accounting standards, if currently adopted, would have a material effect on the consolidated financial position, statements of operations and cash flows.

RESEARCH AND DEVELOPMENT

As of December 31, 2019, the Company has obtained 12 exclusively licensed technologies in neurology, infectious diseases, gastroenterology, oncology, surgical robotics and natural health and is in the process of developing two “in-house” projects in the neurology area. For the years ended December 31, 2019 and 2018, the Group incurred \$6,939,051 and \$3,101,432, respectively, on research and development expenses.

OFF-BALANCE SHEET ARRANGEMENTS

As at December 31, 2019, the Company did not have any off-balance sheet debt, nor do we have any transactions, arrangements or relationships with any special purpose entities.

F. Contractual Obligations

The following table sets forth our contractual obligations as of December 31, 2019.

	Payment Due by Period		
	Total	One to three years	Three to five years
	US\$	US\$	US\$
Operating lease commitments	1,070,214	1,070,214	-

Operating lease commitments

We have several operating leases, primarily for offices. Our principal executive offices are located in Hong Kong; we also have offices in London and Jersey City. Payments under operating leases are expensed on a straight-line basis over the periods of the respective leases, and the terms of the leases do not contain rent escalation, contingent rent, and renewal or purchase options. The aggregate future minimum payment under these non-cancelable operating leases are summarizes in the table above.

CONTINGENT PAYMENT OBLIGATIONS

We have entered into agreements with independent third parties for purchasing office and laboratory equipment. As of December 31, 2019, we had non-cancellable purchase commitments of \$61,859.

We have additional contingency payment obligations under each of the license agreements, such as milestone payments, royalties, research and development funding, if certain condition or milestone is met.

Milestone payments are to be made upon achievements of certain conditions, such as Investigational New Drugs (“IND”) filing or U.S. Food and Drug Administration (“FDA”) approval, first commercial sale of the licensed products, or other achievements. The aggregate amount of the milestone payments that we are required to pay up to different achievements of conditions and milestones for all the license agreements signed as of December 31, 2019 are below:

	Amount
Drug molecules: up to the conditions and milestones of	
Preclinical to IND filing	\$ 372,564
From entering phase I to before first commercial sale	24,216,410
First commercial sale	15,656,410
Net sales amount more than certain threshold in a year	75,769,231
Subtotal	116,014,615
Surgical robotics and medical devices: up to the conditions and milestones of	
Before FDA approval	270,000
FDA approval obtained	200,000
Subtotal	470,000
Total	\$ 116,484,615

For the years ended December 31, 2019 and 2018, we incurred \$nil and \$30,000 milestone payments, respectively. For the years ended December 31, 2019 and 2018, we did not incur any royalties or research and development funding, respectively. As of December 31, 2019, no other milestone payments had been triggered under any of the existing license agreements.

G. Safe Harbor

This annual report contains forward-looking statements that are based on our management’s beliefs and assumptions and on information currently available to us. These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements.

You can identify these forward-looking statements by words or phrases such as “may,” “will,” “expect,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “potential,” “continue,” “is/are likely to” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to:

- our goals and strategies;
- our future business development, financial conditions and results of operations;
- our expectations regarding demand for and market acceptance of our products once available;
- our expectations regarding our development and commercialization of our therapeutics;
- competition in our industry; and
- relevant government policies and regulations relating to our industry.

You should thoroughly read this annual report and the documents that we refer to in this annual report with the understanding that our actual results in the future may be materially different from or worse than what we expect. We qualify all of our forward-looking statements by these cautionary statements. Other sections of this annual report include additional factors which could adversely affect our business and financial performance. Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Important risks and factors that could cause our actual results to be materially different from our expectations are generally set forth in “Item 3. Key Information—D. Risk Factors” and elsewhere in this annual report.

The forward-looking statements made in this annual report relate only to events or information as of the date on which these statements are made in this annual report. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this annual report. You should not rely upon forward-looking statements as predictions of future events.

Item 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

Below is a list of our directors, senior management and any employees upon whose work we are dependent as of the date of this annual report, and a brief account of the business experience of each of them. The business address for the directors and officers of Aptorum Group Limited is 17th floor, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong.

On October 10, 2019, Mr. Lui resigned from his position as Chief Business Officer.

Name	Age	Position
<i>Executive Officers</i>		
Ian Huen	40	Founder, Chief Executive Officer and Executive Director
Darren Lui	39	President and Executive Director
Clark Cheng	40	Chief Medical Officer and Executive Director
Sabrina Khan	38	Chief Financial Officer
Thomas Lee	47	Head of Research and Development
Angel Ng	39	Chief Operating Officer
<i>Non-Management Directors</i>		
Charles Bathurst	65	Independent Non-Executive Director and Chair of Audit Committee
Mirko Scherer	51	Independent Non-Executive Director
Justin Wu	50	Independent Non-Executive Director and Chair of Compensation Committee
Douglas Arner	50	Independent Non-Executive Director and Chair of Nominating and Corporate Governance Committee

*Executive Officers***MR. IAN HUEN, Founder, Chief Executive Officer and Executive Director**

Mr. Ian Huen is the Founder, Chief Executive Officer and Executive Director of Aptorum Group Limited. Mr. Huen is also Co-Founder of a Hong Kong company, AENEAS CAPITAL LIMITED, a licensed corporation regulated by the Hong Kong Securities & Futures Commission as a Type 9 Asset Manager, since 2005. He has over 17 years of global asset management experience and previously covered the U.S. healthcare sector as an equity research analyst at Janus Henderson Group plc (formerly known as Janus Capital). Mr. Huen was the financial advisor in the sale of Seng Heng Bank Limited (Macau) to Industrial and Commercial Bank of China in 2007 and was appointed as the vice president of the Board of General Meeting in Industrial and Commercial Bank of China (Macau) Capital Limited in March 2007 for a term of 12 years until March 2019.

As a trustee board member of the Dr. Stanley Ho Medical Development Foundation, Mr. Huen facilitates advisory, development funding, access to research resources across Asia and continues to establish relationships with leading academic institutions to propel innovations in healthcare.

Mr. Huen graduated from Princeton University with an A.B. degree in Economics in June 2001, earned a MA in Comparative and Public History from CUHK in June 2016. Mr. Huen is also a Chartered Financial Analyst ("CFA").

MR. DARREN LUI, President and Executive Director

Mr. Darren Lui is the President and Executive Director of Aptorum Group Limited. Mr. Lui is also an Executive Director and Co-Founder of AENEAS CAPITAL LIMITED, a licensed corporation regulated by the Hong Kong Securities & Futures Commission as a Type 9 Asset Manager.

Mr. Lui was previously the founder, director and responsible officer of Varengold Capital Securities Limited and Varengold Capital Asset Management Limited in Hong Kong, with subsidiaries operating brokerage, asset management, and investment businesses in Asia established since January 2015.

Prior to this, he was a Director within the Fixed Income Group of Barclays Capital, where he spent over nine years from September 2005 to February 2014 developing and establishing their London, Singapore and New York structuring teams. From September 2002 to August 2005 he was qualified as a Chartered Accountant with Ernst & Young LLP (London), specializing in capital markets advisory.

Mr. Lui graduated with First-Class Honors from Imperial College, London with a BSc degree in Biochemistry in June 2002. He is a Chartered Accountant (ICAS), a CFA, and an Associate of Chartered Institute of Securities & Investments (UK).

**DR. CLARK CHENG, Chief Medical Officer and Executive Director, Aptorum Group Limited
Executive Director, Aptorum Medical Limited**

Dr. Clark Cheng is the Chief Medical Officer and Executive Director of Aptorum Group Limited; he is also an executive director of AML. Prior to this appointment, Dr. Cheng served as the Operations Director since 2009 of Raffles Medical Group, and the company's Deputy General Manager since 2011, representing an expanded role in the region. During his employment with Raffles Medical Group, he practiced as a full-time medical administrator to overlook Raffles Medical Hong Kong operations and supported its development in the PRC.

Dr. Cheng received his medical training at the University College London, UK, in 2005 and completed his foundation year training at The Royal Free Hospital in 2007. Pursuing his career in surgery, he obtained his membership of the Royal College of Surgeons of Edinburgh in 2009 and commenced his training in Orthopaedics where he practiced as Specialist Registrar at the National University Hospital, Singapore, with special interest in Traumatology of the lower limbs. In 2011, he also obtained his Master in Business & Administration with distinction from Tippie College of Business, University of Iowa, US.

Dr. Cheng is an active member of the Singapore Chamber of Commerce, and appears regularly as a guest speaker for The Open University of Hong Kong, The Airport Authority Hong Kong and other corporate events.

MISS SABRINA KHAN, Chief Financial Officer

Miss Sabrina Khan is the Chief Financial Officer of Aptorum Group Limited; she is also the company secretary. She leads the Company's financial strategy and operations, as well as Investor Relations. She has extensive experience working at KPMG (Hong Kong) and Ernst & Young LLP (Hong Kong). She was a regional financial controller in Asia for St. James's Place Wealth Management (Hong Kong), which St. James's Place Wealth Management Group (LON: STJ) is a FTSE100 company. Prior to that, she served as the senior finance manager of Neo Derm Group, a leading medical aesthetic group in Asia, in charge of its finance-related matters and expansion in the PRC. From August 2009 to May 2013, she served as the senior finance manager of Global Cord Blood Corporation (formerly known as China Cord Blood Corporation (NYSE: CO)), which was previously a subsidiary of Golden Meditech Holdings Limited (HK: 801), where she played an important role with the NYSE listing filings, investor relations and post IPO reporting. During her employment with Global Cord Blood Corporation, she was actively involved in the issuance of convertible bonds to Kohlberg Kravis Roberts and various merger and acquisition projects, facilitated and liaised with investment banks on due diligence, deal structuring, and also involved in commercial negotiation with respect to major contract terms.

Miss Khan qualified as certified public accountant and graduated with a BBA (Hons) in Accounting & Finance at The University of Hong Kong in 2003. She was qualified as an Advanced China Certified Taxation Consultant in 2015.

DR. THOMAS LEE, Head of Research and Development

Dr. Thomas Lee serves as the Head of R&D of Aptorum Group Limited since April 1, 2019; he is also the Chairman of our Scientific Advisory Board. Dr. Lee served as Chief Executive Officer and Chief Scientific Officer of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from January 2018 to March 2019. Prior to that, Dr. Lee served as an Assistant Professor in the School of Pharmacy, Faculty of Medicine, The Chinese University of Hong Kong from August 2013 to January 2018. Dr. Lee's key area of research involves drug delivery with specialties including: formulation development of poorly soluble compounds, oral delivery, Nanotechnology, and similar fields.

Prior to academia, Dr. Lee accumulated big-pharma experience from the decade he spent at two multinational pharmaceutical companies in the U.S. From November 2008 to July 2013, Dr. Lee worked at Celgene Corporation as a Senior Scientist of the Formulations Research & Development. From June 2003 to November 2008, Dr. Lee worked at Novartis Pharmaceuticals Corporation, as a Principal Scientist.

Dr. Lee graduated with B.Pharm. (Hons) Degree from The Chinese University of Hong Kong in December 1995, and received his Ph.D. in Pharmaceutical Sciences (Drug Delivery) from the University of Wisconsin-Madison in the U.S in May 2003.

DR. ANGEL NG, Chief Operating Officer

Dr. Angel Ng serves as the Chief Operating Officer ("COO") of Aptorum Group Limited since April 1, 2019. Dr. Ng. served as the COO of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from September 2017 to March 2019. During this time, Dr. Ng led Aptorum Therapeutics Limited and its subsidiaries' operations and business strategies. Dr. Ng has extensive experience in project management with Innovation and Technology government funds and academic institutions.

Since September 2016, Dr. Ng works as a Research Officer cum Project Manager at The University of Hong Kong ("HKU") in project management for various research projects including government funded project of novel medical device. During this time, Dr. Ng led the research team towards cadaveric trial for a novel soft robotics medical device and coordinated all research related agreements. During December 2014 to September 2015, Dr. Ng served as Project Manager at Hong Kong Science & Technology Parks Corporation ("HKSTP"), where she worked on technology transfer and commercialization for research and development projects through partnerships between local universities and the worldwide network and expertise of the Oxford University commercial arm. Dr. Ng also worked for The Chinese University of Hong Kong ("CUHK") as Project Manager from September 2007 to January 2009. She managed a HK\$60M government funded R & D project with a team of specialists in CUHK where she kept close liaison with industry and government authorities. Dr. Ng was in the precision chemical machining industry from 2003 to 2007, where she managed the manufacturing team and business operations in PRC.

Dr. Ng serves as a Director of Tecford Trading & Technology Company Limited since December 2017. Dr. Ng graduated with a B.Sc (Hons) from Department of Chemistry at HKU in December 2002, received her M.Sc in Composite Materials from Imperial College London in November 2003 and obtained her Ph.D. in Mechanical Engineering from HKU in December 2015.

Independent Non-Executive Directors

MR. CHARLES BATHURST

Mr. Bathurst is an Independent Non-Executive Director of Aptorum Group Limited. He has over 41 years' experience of management and senior executive roles primarily in financial services. In 2011, he set up his own independent consultancy service, Summerhill Advisors Limited, advising on management structure, business development, financial reporting, internal audit controls and compliance to both emerging and multinational companies. Today he holds Non-Executive and Advisory board positions on fast-growing companies in healthcare, technology and financial services.

Prior to establishing Summerhill, he served as a Director for J.O. Hambro Investment Management from September 2008 to August 2011, where he oversaw the restructuring and commercialization a range of in-house investment funds. He was appointed to the management board and supervised reporting teams including Business development, accounting teams, regulatory reporting teams and internal controls.

From April 2004 to March 2008, Mr. Bathurst served in multiple roles at Old Mutual Asset Managers (UK), including being a member of the senior management team and head of international sales. Duties included business development, launching new investment funds, recruitment, establishing and supervision of regulatory and financial reporting teams, as well as ensuring compliance with funds' regulatory requirements and corporate governance standards.

Prior to this, Mr. Bathurst was an advisor to Lion Capital Advisors Limited from April 2003 to March 2004, and from June 2002 to March 2003 business development reporting to the board of management of LCF Rothschild Asset Management Limited.

From April 1995 to March 2002, Mr. Bathurst joined a newly formed alternative investment management team at Credit Agricole Asset Management, establishing the London Branch as the Managing Director in 1998. He was responsible for the recruitment and development strategy for marketing, sales, investment, financial reporting, compliance and regulatory controls and investor relations.

Between the period of September 1989 and December 1994, Mr. Bathurst worked for GNI, the largest futures and options execution and clearing broker on the London International Financial futures Exchange, where he focused on marketing to European and Middle East financial institutions. In 1991, he joined a new management team to launch a series of specialist investment funds while serving as the Head of Sales and Product Development.

Mr. Bathurst graduated from the Royal Military Academy Sandhurst in November 1974 and commissioned into the British Army serving in the UK and Germany.

DR. MIRKO SCHERER

Dr. Mirko Scherer is an Independent Non-Executive Director of Aptorum Group Limited. Dr. Scherer has been serving as the Chief Executive Officer at CoFeS China (formerly known as “TVM Capital China”) in Hong Kong since March 2015. CoFeS China focuses on cross-border activities in the life science industry between China and the West. CoFeS China acts as a bridge between China and the West, assisting Chinese investors and pharmaceutical companies accessing western innovations, while collaborating with innovative life science companies from the West to enter the fast-growing China market.

Dr. Mirko Scherer has served on the Board of the Frankfurt Stock Exchange from 2005 to 2007 and has been a board member of the Stichting Preferente Aandelen QIAGEN since 2004. From August 2016 through July 2018, Dr. Scherer served as a Non-Executive board member of Quantapore Inc. and from April 2015 through September 2017, he was a director of China BioPharma Capital I, (GP).

Dr. Scherer is an experienced biotechnology executive and has led numerous financing M&A and licensing transactions, in both public and private markets, in Europe and the U.S. for over 20 years. He consulted MPM Capital for the period between July 2012 and December 2014. Dr. Scherer was also a co-founder and partner of KI Kapital from November 2008 to February 2014, a company which was specialized in providing consultation in life science industry.

Prior to working in the venture capital industry, Dr. Scherer co-founded GPC Biotech (Munich and Princeton, NJ) and served as the Chief Financial Officer from October 1997 to December 2007. GPC Biotech engaged in numerous pharmaceutical alliances with companies such as Sanofi Aventis, Boehringer Ingelheim, Altana (now part of Takeda), Yakult, and Pharmion (now part of Celgene). Dr. Scherer has established an extensive network in the U.S., European, and China's biotechnology and venture capital industry. Prior to his time at GPC Biotech, Dr. Scherer worked as a consultant from May 1993 to June 1994 at the Boston Consulting Group.

Dr. Scherer earned a Doctorate in Finance from the European Business School in Oestrich-Winkel/Germany in 1998, a MBA from Harvard Business School in June 1996, and a degree in Business Administration from the University of Mannheim/Germany in February 1993.

DR. JUSTIN WU

Dr. Justin Wu is an Independent Non-Executive Director of Aptorum Group Limited. He also has been serving as the Chief Operating Officer of CUHK Medical Centre since August 2018. He served as the Associate Dean (Development) of the Faculty of Medicine at CUHK from July 2014 to June 2018 and the Associate Dean (Clinical) of the Faculty of Medicine at CUHK from December 2012 to July 2014, and has been serving a Professor in the Department of Medicine and Therapeutics since 2009, also the Director of the S. H. Ho Center for Digestive Health, a research center specializing in functional gastrointestinal diseases, reflux and motility disorders, and digestive endoscopy. Active in research publications and assessments, Dr. Wu served as the International Associate Editor of American Journal of Gastroenterology (“AJG”), and Managing Editor of Journal of Gastroenterology and Hepatology (“JGH”). He is also the Secretary General of the Asian Neurogastroenterology and Motility Association (“ANMA”), and Secretary General of the Asia Pacific Association of Gastroenterology (“APAGE”).

Dr. Wu has won a number of awards including the Emerging Leader in Gastroenterology Award by the JGH Foundation, and the Vice Chancellor's Exemplary Teaching Award at CUHK. Aside from his expertise in gastroenterology, Dr. Wu has an extensive interest in the development of Integrative Medicine in Hong Kong. He is the Founding Director of the Hong Kong Institute of Integrative Medicine, working closely with the School of Chinese Medicine to develop an integrative model at an international level. The institute aims at maximizing the strength of Western and Chinese medicine to provide a safe and effective integrative treatment to patients.

Dr. Wu served as a consultant and an advisory board member for Takeda Pharmaceutical, AstraZeneca, Menarini, Reckitt Benckiser and Abbott Laboratory. He earned his Bachelor of Medicine and Bachelor of Surgery Degree (1993), and his Doctor of Medicine Degree (2000) from CUHK. Additionally, he attained Fellowships of the Royal College of Physicians of Edinburgh and London in 2007 and 2012 respectively, Fellowship of the Hong Kong College of Physicians in 2002, Fellowship of the Hong Kong Academy of Medicine in 2002, and has been an American Gastroenterological Association Fellow since 2012.

PROFESSOR DOUGLAS ARNER

Professor Douglas W. Arner is an Independent Non-Executive Director of Aptorum Group Limited. He is the Kerry Holdings Professor in Law at the University of Hong Kong and one of the world's leading experts on financial regulation, particularly the intersection between law, finance and technology. At HKU, he is Faculty Director of the Faculty of Law's LLM in Compliance and Regulation, LLM in Corporate and Financial Law and Law, Innovation, Technology and Entrepreneurship (LITE) Programmes. He is a Senior Visiting Fellow of Melbourne Law School, University of Melbourne, and an Executive Committee Member of the Asia Pacific Structured Finance Association. He led the development of the world's largest massive open online course (MOOC): Introduction to FinTech, launched on edX in May 2018, now with over 35,000 learners spanning every country in the world. From 2006 to 2011, he was the Director of HKU's Asian Institute of International Financial Law, which he co-founded in 1999, and from 2012 to 2018, he led a major research project on Hong Kong's future as a leading international financial center. He was an inaugural member of the Hong Kong Financial Services Development Council, of which he was a member from 2013-2019. Douglas served as Head of the HKU Department of Law from 2011 to 2014 and as Co-Director of the Duke University-HKU Asia-America Institute in Transnational Law from 2005 to 2016. He has published fifteen books and more than 150 articles, chapters and reports on international financial law and regulation, including most recently Reconceptualising Global Finance and its Regulation (Cambridge 2016) (with Ross Buckley and Emiliós Avgouleas). The RegTech Book (forthcoming 2019, with Janos Barberis and Ross Buckley). His recent papers are available on SSRN at https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=524849, where he is among the top 150 authors in the world by total downloads.

Douglas has served as a consultant with, among others, the World Bank, Asian Development Bank, APEC, Alliance for Financial Inclusion, and European Bank for Reconstruction and Development, and has lectured, co-organized conferences and seminars and been involved with financial sector reform projects around the world. He has been a visiting professor or fellow at Duke, Harvard, the Hong Kong Institute for Monetary Research, IDC Herzliya, McGill, Melbourne, National University of Singapore, University of New South Wales, Shanghai University of Finance and Economics, and Zurich, among others. Since March 1, 2018, Professor Arner is the Senior Regulatory & Strategic Advisor of AENEAS CAPITAL LIMITED, a licensed corporation regulated by the Hong Kong Securities & Futures Commission as a Type 9 Asset Manager.

He holds a BA from Drury College (where he studied literature, economics and political science) in 1992, a JD (cum laude) from Southern Methodist University in 1995, an LLM (with distinction) in banking and finance law from the University of London (Queen Mary College) in 1996, and a PhD from the University of London in 2005.

B. Compensation of Directors and Executive Officers

The following table sets forth all cash compensation paid by us, as well as certain other compensation paid or accrued, in fiscal 2019 to each of the following named executive officers. The total amount was \$2.7 million in 2019. A total 69,819 options were awarded to directors and executive officers in 2019. This amount does not include business travel, relocation, professional and business association dues and expenses reimbursed to such persons, and other benefits commonly reimbursed or paid by companies in our industry. In addition to the compensation included in the table below, which covers the fiscal year ended December 31, 2019, we issued an aggregate of 296,769 options to the persons included in the table below since January 1, 2020 through the date of this report. (See "Item 6. Directors, Senior Management and Employees – E. Share Ownership")

The base salary of Mr. Huen and Dr. Cheng shall remain unchanged in 2020, and the base salary of Mr. Lui has been adjusted to US\$6,667 per month with effect from January 10, 2020 due to his resignation as Chief Business Officer. The Company entered into a consulting agreement with CGY Investment Limited effective on January 10, 2020, with a monthly service fee of HK\$104,000 (approximately US\$13,333 per month). CGY is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother). Mr. Lui controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother. Hence, for the purposes of this filing and disclosure, 50% of the consulting service fee and share options will be deemed as Mr. Lui's compensation.

Name and Principal Position	Fiscal Year	Salary (\$) ⁽¹⁾	Bonus (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$) ⁽¹⁰⁾	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Ian Huen ⁽²⁾ (CEO)	2019	288,000	24,000	148,275	129,791	2,308	-	592,374
Darren Lui ⁽³⁾ (CBO, President)	2019	240,000	20,000	148,275	129,791	2,308	-	540,374
Clark Cheng ⁽⁴⁾ (CMO)	2019	279,295	23,275	148,275	129,791	2,308	112 ⁽⁶⁾	583,056
Sabrina Khan ⁽⁵⁾ (CFO)	2019	196,000	65,333	70,040	61,310	2,308	-	394,991
Thomas Lee ⁽⁷⁾ (Head of R&D)	2019	168,000	18,667	148,275	129,791	2,308	-	467,041
Angel Ng ⁽⁸⁾ (COO)	2019	72,000	8,000	11,440	10,012	2,308	-	103,760
Dr. Keith Chan ⁽⁹⁾	2019	30,000	-	-	-	-	-	30,000

(1) The Appointment Letters provide salaries in HKD; for purposes of this table, we used a conversion ratio of HKD7.80 to USD1.00 to determine the salary in USD.

(2) Mr. Huen is the founder and was appointed as the Chief Executive Officer of Aptorum Group on October 1, 2017. Before that, he was a director of the Company.

(3) Mr. Lui was appointed as the Chief Business Officer and President of Aptorum Group on October 1, 2017 and resigned as Chief Business Officer on October 10, 2019.

(4) Dr. Cheng was appointed as the Chief Medical Officer of Aptorum Group on January 2, 2018.

(5) Miss Khan was appointed as the Chief Financial Officer of Aptorum Group on October 16, 2017.

(6) Pursuant to Dr. Cheng's appointment letter, Dr. Cheng received a share bonus of 526 ordinary shares of AML, representing 5% of AML's issued and outstanding ordinary shares (the "Share Bonus") in 2018. Based on the Company's financial position and Dr. Cheng's performance, on each anniversary of Dr. Cheng's employment commencement date, the Share Bonus is eligible to increase by 1% of AML's then issued and outstanding ordinary share count per year up to a maximum additional amount of 5% of AML's then issued and outstanding ordinary share count by the 5th anniversary from his employment commencement date. As of the date of this annual report, Dr. Cheng received a total of 753 ordinary shares of AML, representing 7% of AML's issued and outstanding ordinary shares; during fiscal 2019, Dr. Cheng received 112 ordinary shares of AML, the cash value of which is USD112.

(7) Dr. Lee was appointed as the Head of Research & Development of Aptorum Group on April 1, 2019. Before that, he was the Chief Executive Officer and Chief Scientific Officer of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from January 2018 to March 2019, for which he received an aggregate of \$56,000 for the period from January 1, 2019 to March 31, 2019. This table only includes the compensation paid or payable to Dr. Lee for the period from April 1, 2019 to December 31, 2019.

(8) Dr. Ng was appointed as the Chief Operating Officer of Aptorum Group on April 1, 2019. Before that, she was the Chief Operating Officer of Aptorum Therapeutics Limited, a wholly-owned therapeutics subsidiary of Aptorum Group Limited from September 2017 to March 2019, for which she received an aggregate of \$24,000 for the period from January 1, 2019 to March 31, 2019. This table only includes the compensation paid or payable to Dr. Ng for the period from April 1, 2019 to December 31, 2019.

(9) As described elsewhere in this report, we were party to a consulting agreement dated August 18, 2017 with GloboAsia, LLC, for which Dr. Chan serves as the Director of International Affairs. All fees payable to Dr. Chan for services provided to us as Chief Scientific Officer were paid to GloboAsia, LLC, pursuant to the consulting agreement and appointment letter with Dr. Chan. Following Dr. Chan's resignation in March 2019, the consulting agreement was terminated effective as of March 31, 2019. (See "Item 7. Major Shareholders and Related Party Transactions – Consulting Arrangements") No other compensation was paid or payable to Dr. Chan for the period from April 1, 2019 to December 31, 2019.

(10) Represents deferred bonuses provided to directors and executive officers, which will be vested after 1-2 year vesting period.

Compensation of Non-executive Directors

The following table sets forth information for the fiscal year ended December 31, 2019 regarding the compensation of our non-executive directors who at December 31, 2019, were not also named executive officers. A total 8,044 options were awarded to non-executive directors in 2019. In addition to the compensation included in the table below, which covers the fiscal year ended December 31, 2019, we issued an aggregate of 37,460 options to the persons included in the table below since January 1, 2020 through the date of this report.

Name	Fees Earned or Paid in Cash (S)	Stock Awards (S)	Option Awards (S)	Non-Equity Incentive Plan Compensation (S)	Non-qualified Deferred Compensation Earnings (S)	All Other Compensation (S)	Total (S)
Charles Bathurst ⁽¹⁾	48,000 ⁽²⁾	-	14,832	12,987	-	-	75,819
Mirko Scherer ⁽³⁾	30,000	-	14,832	12,987	-	-	57,819
Justin Wu ⁽⁴⁾	30,000	-	14,832	12,987	-	-	57,819
Douglas Arner ⁽⁵⁾	30,000	-	14,832	12,987	-	-	57,819

- (1) Mr. Bathurst was appointed as one of our directors as of October 2017 and pursuant to his appointment letter, is entitled to receive \$48,000 annually for his combined services as a director and a committee member.
- (2) Mr. Bathurst’s appointment Letter provides his salary in GBP. For purposes of this table, we used a conversion ratio of GBP0.75 to USD1.00 to determine his salary in USD; however, the ultimate amount paid is based on the actual rate as of the relevant pay day at the end of each month.
- (3) Dr. Scherer was appointed as one of our directors as of October 2017 and pursuant to his appointment letter, is entitled to receive \$30,000 annually for his services as a director.
- (4) Dr. Wu was appointed as one of our directors as of October 2017 and pursuant to his appointment letter, is entitled to receive \$30,000 annually for his combined services as a director and a committee member.
- (5) Professor Arner’s appointment as one of our directors became effective as of April 1, 2018. Pursuant to his appointment letter, Professor Arner is entitled to receive \$30,000 annually for his combined services as a director and a committee member.

2017 Share Option Plan

On October 13, 2017, we adopted the 2017 Share Option Plan (the “Option Plan”). Under the Option Plan, up to an aggregate of 5,500,000 Class A Ordinary Shares (subject to subsequent adjustments described more fully below) may be issued pursuant to awards under the Option Plan. Subsequent adjustments include that on each January 1, starting with January 1, 2020, an additional number of shares equal to the lesser of (A) 2% of the outstanding number of Class A Ordinary Shares (on a fully diluted basis) on the immediate preceding December 31, and (B) such lower number of Class A Ordinary Shares as may be determined by the board of directors, subject in all cases to adjustments as provided in Section 10 of the Option Plan. Awards will be made pursuant to agreements and may be subject to vesting and other restrictions as determined by the board of directors.

We adopted the Option Plan to provide additional incentives to selected directors, officers, employees and consultants, and enable our Company to obtain and retain the services of these individuals. The Option Plan will enable us to grant options, restricted shares or other awards to our directors, employees and consultants. Awards will be made pursuant to agreements and may be subject to vesting and other restrictions as determined by the board of directors.

As of the date of this report, we have granted options that can be exercised for an aggregate of 773,104 Class A Ordinary Shares. 218,222 options were granted on March 15, 2019. One-half of each option grant vests on January 1, 2020 and the other half vests on January 1, 2021. The exercise price is \$12.91 per share, which was based on the closing price of the shares traded on the NASDAQ stock exchange on the trading day preceding the grant date. 554,882 options were granted on March 16, 2020. One-half of each option grant vests on January 1, 2021 and the other half vests on January 1, 2022. The exercise price is \$2.99 per share, which was based on the average closing price of the shares traded on the NASDAQ stock exchange for the five trading days immediately preceding the grant date.

C. Board Practices

Board of Directors

Our Board of Directors currently consists of seven members, all of whom were elected pursuant to our current Memorandum and Articles. Our nominating and governance committee and board of directors will consider a broad range of factors relating to the qualifications and background of nominees, which may include diversity and is not limited to race, gender or national origin. We have no formal policy regarding board diversity. Our nominating and governance committee's and board of directors' priority in selecting board members is identification of persons who will further the interests of our shareholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and professional and personal experiences and expertise relevant to our growth strategy.

Committees of the Board of Directors

Our Board of Directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which operates pursuant to a separate charter adopted by our Board of Directors. The composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the NASDAQ Global Market and SEC rules and regulations. Our Board of Directors may establish other committees from time to time.

Audit Committee

Charles Bathurst, Douglas Arner and Justin Wu currently serve on the audit committee, which is chaired by Charles Bathurst. Our Board of Directors has determined that each member of the audit committee is "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable rules of the NASDAQ Global Market. The audit committee's responsibilities include:

- selecting and appointing our independent registered public accounting firm, and approving the audit and permitted non-audit services to be provided by our independent registered public accounting firm;
- evaluating the performance and independence of our independent registered public accounting firm;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements or accounting matters;
- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures;
- establishing procedures for the receipt, retention and treatment of accounting-related complaints and concerns;
- reviewing and discussing with the independent registered public accounting firm the results of our year-end audit, and recommending to our Board of Directors, based upon such review and discussions, whether our financial statements shall be included in our annual report on Form 20-F;
- reviewing all related party transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing the type and presentation of information to be included in our earnings press releases, as well as financial information and earnings guidance provided by us to analysts and rating agencies.

Audit Committee Financial Expert

We have one financial expert as of the date of this report. Our Board of Directors has determined that Mr. Charles Bathurst, Chair of our audit committee, qualifies as an “audit committee financial expert” as defined in the SEC rules and satisfies the financial sophistication requirements of The NASDAQ Global Market.

Compensation Committee

Charles Bathurst, Douglas Arner and Justin Wu currently serve on the compensation committee, which is chaired by Justin Wu. Our Board of Directors has determined that each member of the compensation committee is “independent” as that term is defined in the applicable rules of the NASDAQ Global Market. The compensation committee’s responsibilities include:

- reviewing the goals and objectives of our executive compensation plans, as well as our executive compensation plans in light of such goals and objectives;
- evaluating the performance of our executive officers in light of the goals and objectives of our executive compensation plans and recommending to our Board of Directors with respect to the compensation of our executive officers;
- reviewing the goals and objectives of our general compensation plans and other employee benefit plans as well as our general compensation plans and other employee benefit plans in light of such goals and objectives;
- retaining and approving the compensation of any compensation advisors;
- reviewing all equity-compensation plans to be submitted for shareholder approval under the NASDAQ listing rules, and reviewing and approving all equity-compensation plans that are exempt from such shareholder approval requirement;
- evaluating the appropriate level of compensation for board and board committee service by non-employee directors; and
- reviewing and approving description of executive compensation included in our annual report on Form 20-F.

Nominating and Corporate Governance Committee

Charles Bathurst, Douglas Arner and Justin Wu currently serve on the nominating and corporate governance committee, which is chaired by Professor Arner. Our Board of Directors has determined that each member of the nominating and corporate governance committee is “independent” as that term is defined in the applicable rules of the NASDAQ Global Market. The nominating and corporate governance committee’s responsibilities include:

- assisting our Board of Directors in identifying prospective director nominees and recommending nominees for election by the shareholders or appointment by our Board of Directors;
- advising the board of directors periodically with respect to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to our Board of Directors on all matters of corporate governance and on any corrective action to be taken;
- overseeing the evaluation of our Board of Directors; and
- recommending members for each board committee of our Board of Directors.

Scientific Advisory Board

We restructured the Scientific Assessment Committee into a newly formed Scientific Advisory Board. The Scientific Advisory Board shall help the Company sharpen its focus on innovation and technological advancements and address critical scientific challenges in our research and development; it will provide overall advise on the scientific development of the company. As of the date of this annual report, we have 21 members on this board.

Family Relationships

There is no family relationship among any of our directors or executive officers.

Duties of Directors

Under Cayman Islands law, our directors have a duty to act honestly, in good faith and bona fide with a view to our best interests. Our directors also have a duty to exercise the care, diligence and skills that a reasonably diligent person would exercise in comparable circumstances. In fulfilling their duty of care to us, our directors must ensure compliance with our Memorandum and Articles. We have the right to seek damages if a duty owed by our directors is breached.

The functions and powers of our Board of Directors include, among others:

- appointing officers and determining the term of office of the officers;
- authorizing the payment of donations to religious, charitable, public or other bodies, clubs, funds or associations as deemed advisable;
- exercising the borrowing powers of the company and mortgaging the property of the company;
- executing checks, promissory notes and other negotiable instruments on behalf of the company; and
- maintaining or registering a register of mortgages, charges or other encumbrances of the company.

Terms of Directors and Officers

There is no Cayman Islands law requirement that a director must hold office for a certain term and stand for re-election unless the resolutions appointing the director impose a term on the appointment. The Memorandum and Articles provide that our directors will be elected annually to serve a term of one year, or until his or her earlier resignation or removal. We do not have any age limit requirements relating to our director's term of office.

Our Memorandum and Articles also provide that our directors may be removed by the directors or ordinary resolution of the shareholders, and that any vacancy on our Board of Directors, including a vacancy resulting from an enlargement of our Board of Directors (which shall not exceed any maximum number stated therein), may be filled by ordinary resolution or by vote of a majority of our directors then in office.

Employment Agreements

We have entered into agreements with our executive officers. Each of our executive officers is employed for a specified time period, which will be renewed upon both parties' agreement. We may terminate the employment for cause, at any time, without notice or remuneration, for certain acts of the executive officer, including but not limited to the commitments of any serious or persistent breach or non-observance of the terms and conditions of the employment, conviction of a criminal offense, willful disobedience of a lawful and reasonable order, fraud or dishonesty, receipt of bribery, or severe neglect of his or her duties.

Each executive officer has agreed to hold, both during and after the employment agreement expires, in strict confidence and not to use or disclose to any person, corporation or other entity without written consent, any confidential information. Each executive officer has also agreed to assign to our group all his or her all inventions, improvements, designs, original works of authorship, formulas, processes, compositions of matter, computer software programs, databases, mask works, concepts and trade secrets.

D. Employees

As of the date of this annual report, we have 37 employees, including 36 full-time employees and 1 part-time employee. Of these, 12 are engaged in full-time research and development and laboratory operations, 18 are engaged in general and administrative functions, 6 are full-time employees engaged in the clinic operation and 1 part-time employee is engaged in legal clerical support. As of the date of this annual report, 37 of our employees are located in Hong Kong. In addition, we have engaged and may continue to engage 39 independent contracted consultants and advisors to assist us with our operations. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have never experienced any employment related work stoppages, and we consider our relations with our employees to be good.

E. Share Ownership

The following table sets forth information with respect to the beneficial ownership, within the meaning of Rule 13d-3 under the Exchange Act, of our Ordinary Shares as of April 29, 2020.

- each of our directors and executive officers who beneficially own our Ordinary Shares; and
- each person known to us to own beneficially more than 5.0% of our Ordinary Shares.

Beneficial ownership includes voting or investment power with respect to the securities. Except as indicated below, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all Ordinary Shares shown as beneficially owned by them. Percentage of beneficial ownership of each listed person is based on 7,948,712 Class A Ordinary Shares and 22,437,754 Class B Ordinary Shares outstanding as of April 29, 2020.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of 5% or more of our Ordinary Shares. Beneficial ownership is determined in accordance with the rules of the SEC and generally requires that such person have voting or investment power with respect to securities. In computing the number of Ordinary Shares beneficially owned by a person listed below and the percentage ownership of such person, Ordinary Shares underlying options, warrants or convertible securities held by each such person that are exercisable or convertible within 60 days of the date of this annual report are deemed outstanding, but are not deemed outstanding for computing the percentage ownership of any other person. Except as otherwise indicated in the footnotes to this table, or as required by applicable community property laws, all persons listed have sole voting and investment power for all Ordinary Shares shown as beneficially owned by them. As of the date of the annual report, we have 4 shareholders of record holding beneficial ownership of 5% or more, none of which are located in the United States.

Unless otherwise indicated, the business address of each of the individuals is 17th Floor, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong.

Name and Address of Beneficial Owner	Class A Ordinary Shares Beneficially Owned	Class B Ordinary Shares Beneficially Owned	Percentage of Total Class A and Class B Ordinary Shares ⁽¹⁾	Percentage of Total Voting Power ⁽²⁾
Ian Huen ⁽³⁾	2,865,742	16,061,469	62.29%	70.37%
Darren Lui ⁽⁴⁾	260,809	2,141,333	7.91%	9.33%
Clark Cheng ⁽⁵⁾	*	-	*	*
Sabrina Khan ⁽⁶⁾	*	-	*	*
Thomas Lee Wai Yip ⁽⁷⁾	*	-	*	*
Angel Ng Siu Yan ⁽⁸⁾	*	-	*	*
Charles Bathurst ⁽⁹⁾	*	-	*	*
Mirko Scherer ⁽¹⁰⁾	*	-	*	*
Justin Wu ⁽¹¹⁾	207,566	-	0.68%	0.09%
Douglas Arner ⁽¹²⁾	*	-	*	*
All directors and executive officers as a group (10 persons)	3,334,117	18,202,802	70.88%	79.79%
5% Beneficial Owner				
Jurchen Investment Corporation ⁽³⁾	2,855,688	16,061,469	62.26%	70.36%
Sui Fong Isabel Huen Ng ⁽¹³⁾	211,986	1,907,870	6.98%	8.30%
CGY Investments Limited ⁽¹⁴⁾	471,809	4,015,367	14.77%	17.49%

* Less than 1%.

- (1) For each person and group included in this column, percentage ownership is calculated by dividing the number of Class A Ordinary Shares and Class B Ordinary Shares beneficially owned by such person or group, including shares that such person or group has the right to acquire within 60 days after April 29, 2020, by the sum of Class A Ordinary Shares and Class B Ordinary Shares, and the number of Class A Ordinary Shares that such person or group has the right to acquire beneficial ownership within 60 days after April 29, 2020. Following the IPO, each Class B Ordinary Share can be converted at any time on a one-for-one basis into Class A Ordinary Shares at the discretion of the holder.
- (2) For each person and group included in this column, percentage of total voting power represents voting power based on both Class A Ordinary Shares and Class B Ordinary Shares beneficially owned by such person or group with respect to all of our outstanding Class A Ordinary Shares and Class B Ordinary Shares as one single class. Holders of Class A Ordinary Shares are entitled to one vote per share and holders of Class B Ordinary Shares are entitled to ten votes per share on all matters subject to a shareholders' vote.
- (3) Includes 2,315,148 Class A Ordinary Shares owned by Jurchen, warrants held by Jurchen to purchase 540,540 Class A Ordinary Shares, options granted to Mr. Huen to purchase 10,054 Class A Ordinary Shares, and 16,061,469 Class B Ordinary Shares owned by Jurchen. Jurchen Investment Corporation, is a company wholly-owned by Mr. Huen. Mr. Huen maintains sole voting control over the shares held by Jurchen, the principal office address of which is at 17th Floor, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong. Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Mr. Huen pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (4) Includes (i) 14,850 Class A Ordinary Shares and 133,649 Class B Ordinary Shares held by DSF Investment Holdings Limited, which is 29.5% held by Mr. Lui, and 70.5% held by Eternal Clarity Holdings Limited which is wholly-owned by Mr. Lui's mother, Ms. Emily Woo, and is located at Flat A2, 11th Floor, Wing Hang Insurance Building, 11 Wing Kut Street, Hong Kong, (ii) 235,905 Class A Ordinary Shares and 2,007,684 Class B Ordinary Shares held by CGY Investments Limited, which is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother), and (iii) options granted to Mr. Lui to purchase 10,054 Class A Ordinary Shares. Mr. Lui only controls and/or has substantial influence on the disposition and voting rights of 29.5% of the Aptorum shares DSF owns; Mr. Lui controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother regarding the CGY shares. Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to CGY Investments Limited, of which 50% is deemed controlled by Mr. Lui, pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.

- (5) Pursuant to his appointment letter, Dr. Cheng received a stock bonus of 7% of Aptorum Medical Limited's ordinary shares as of the date of this annual report. Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Dr. Cheng pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (6) Does not include 4,749 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 54,627 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Miss Khan pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (7) Does not include 10,053 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 to and 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 Dr. Lee pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (8) Does not include 775 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 8,027 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Dr. Ng pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (9) Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Mr. Bathurst pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (10) Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Mr. Scherer pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (11) Includes (i) 129,589 Class A Ordinary Shares held by Chi Ling Lily Heung, the wife of Dr. Wu, (ii) 76,971 Class A Ordinary Shares held by Dr. Wu, and (iii) options granted to Dr. Wu to purchase 1,006 Class A Ordinary Shares. Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Dr. Wu pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (12) Does not include 1,005 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 15, 2019 and 9,365 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to Dr. Arner pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.
- (13) Sui Fong Isabel Huen Ng is the mother of Mr. Ian Huen. Mr. Ian Huen does not have control nor substantial influence on the disposition and voting rights of the shares held by his mother.
- (14) CGY Investments Limited is 50% held by Seng Fun Yee (Mr. Lui's spouse), 25% held by Mandy Lui (Mr. Lui's sister) and 25% held by Adrian Lui (Mr. Lui's brother). Mr. Lui controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother. Does not include 66,890 Class A Ordinary Shares issuable upon exercise of outstanding options issued on March 16, 2020 to CGY Investments Limited pursuant to the Option Plan, since such options have not vested and will not be exercisable within 60 days of April 29, 2020.

Item 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS**A. Major Shareholders**

Please refer to “Item 6. Directors, Senior Management and Employees—E. Share Ownership.”

B. Related Party Transactions**Sales and Purchases of Securities*****Share Issuances***

KHE Holdings Limited, which is owned by Dr. Kenny Yu’s family, purchased \$200,000 Series A Notes in our private Note offering, which closed on May 15, 2018; such notes automatically converted into 28,776 Class A Ordinary Shares upon the closing of the IPO.

A total of 5,504 shares were purchased in the IPO by related persons.

Share Transfer: Change in direct substantial shareholders of the Company

On May 4, 2017, Mr. Huen transferred all of the ordinary shares in the Company he owned (in the amount of 22,307,596) to Jurchen, a company incorporated in the British Virgin Islands and wholly-owned by Mr. Huen. On October 13, 2017, the ordinary shares held by Jurchen were redesignated as 2,230,760 Class A Ordinary Shares and 20,076,836 Class B Ordinary Shares.

On March 23, 2018, Jurchen transferred 446,152 Class A Ordinary Shares and 4,015,367 Class B Ordinary Shares to CGY Investments Limited, a company incorporated in Hong Kong and which we deem Mr. Darren Lui controls and/or of which he has substantial influence on the disposition rights and voting rights of such shares. Following this transfer, Jurchen owned approximately 33% and 72% of our Class A Ordinary Shares and Class B Ordinary Shares, respectively.

Consulting Arrangements**GloboAsia, LLC**

We entered into a consulting agreement with GloboAsia effective as of August 18, 2017 (the “2017 GA Agreement”); GloboAsia is not associated or affiliated with any FINRA members. However, the 2017 GA Agreement was terminated when Dr. Chan resigned from his position as our Chief Scientific Officer in March 2019. Dr. Chan serves as the Director of International Affairs of GloboAsia.

Effective as of April 1, 2019, GloboAsia, through Dr. Chan, shall serve as a member on our Scientific Advisory Board. To formalize such service, we entered into that certain consulting agreement with GloboAsia dated March 13, 2019 (the “2019 GA Agreement”). Pursuant to the 2019 GA Agreement, GloboAsia provides advisory and management services to us and as a member of the Scientific Advisory Board, they provide advice to us regarding research and development, the scientific merit of licenses or products and other related scientific issues. We agreed to pay GloboAsia an hourly rate of USD300 for work actually performed. The initial term of 2019 GA Agreement is until December 31, 2020 and shall thereafter be automatically renewed for successive one-year terms, unless earlier terminated by either party upon three months’ notice prior to the end of the then applicable term; either party may also terminate the agreement upon 2 months written notice and the Company may terminate the agreement if Dr. Chan is no longer with GloboAsia or if GloboAsia commits any act of fraud or dishonesty.

Aeneas

a. In March 2017, we entered into a new Management Agreement with Aeneas (the "2017 Agreement"), pursuant to which Aeneas will provide certain management and administrative functions, as well as investment functions related to the Company, IP acquisitions and other investor relations services (the "Services"). In consideration for the Services, we agreed to pay Aeneas HK\$500,000 per month (approximately US\$64,103 per month), payable on the last day of each month. The 2017 Agreement was terminated in July 2018. Prior to the termination, we paid Aeneas an aggregate of \$1.1 million pursuant to the terms of the 2017 Agreement.

b. On April 24, 2019, the Company signed an agreement with Aeneas Capital Limited, and A*ccelerate Technologies Pte. Ltd, the enterprise office of the Agency for Science, Technology and Research ("A*STAR"), (collectively, the "Parties") to co-create local deep tech startups. This agreement, which is part of A*ccelerate's venture co-creation ("VCC") initiative, commits all parties to the co-creation of local startups in the healthcare and life science sector (the "Master Collaboration Agreement"). The goal is to create a total of up to 20 deep tech ventures in Singapore will be created by this partnership over the next 5 years. A*STAR shall contribute a total of up to \$30,000,000 to any suitable startups, at their discretion. The Company and Aeneas Capital Limited will contribute a total of up to \$30,000,000 to any suitable startups at their discretion with a focus on (i) securing pilot customers; (ii) incorporation of the startups as companies and financial commitments of such customers; (iii) capital raising and capital market plans; (iv) recruiting and building of the startup teams; (v) equipment and infrastructure; and (vi) licensing of IP to the startups under the Technology License Agreements. The Master Collaboration Agreement shall continue for a period of 5 years, unless otherwise terminated or extended by the Parties.

c. On January 1, 2019, Aptus Management Limited (one of our wholly-owned subsidiaries) ("Aptus Management") entered into an Administrative consultant Services Agreement with Aeneas Management Limited (a subsidiary of Aeneas Limited). Pursuant to this agreement, Aeneas shall provide certain business and financial services to Aptus Management Limited; Aeneas shall be paid a monthly service fee of HK\$452,000 per month (approximately US\$57,949 per month), payable by the 25th day of each month during the term of the agreement, which was until December 31, 2019. Either party was able to terminate the agreement by providing 3-months written notice to the other party. On December 16, 2019, the parties agreed to renew the agreement under the same terms, but with an expiration date of December 31, 2020. On January 29, 2020, both parties agreed the agreement would terminate no later than April 30, 2020, with the final monthly payment to have been paid in March 2020.

d. On January 1, 2019, Aenco Limited ("Aenco") (a subsidiary of AGL) and Aptus Management entered into a Secondment Agreement. Pursuant to this agreement, Aenco shall assign certain of its employees to Aptus Management from time to time to assist Aptus Management with information technology development and maintenance activities for Aptus Management's affiliates; such employees shall be integrated into Aptus Management's organization only to the extent necessary to carry out such employees specific duties for Aptus Management. Aptus Management shall pay all salary and benefits up to HK\$540,000 per month (approximately US\$69,231 per month); Aenco shall be responsible for the costs associated with any employee relocation required as a result of this agreement. The agreement was originally set to terminate on December 31, 2019, although either party may terminate the agreement upon giving the other party 3-months written notice. On December 16, 2019 the parties agreed to renew the agreement under the same terms, but with an expiration date of December 31, 2020. On January 29, 2020, both parties agreed to replace the agreement no later than April 30, 2020.

On April 1, 2020, the agreement was replaced and superseded with a New Secondment Agreement. Pursuant to this New Secondment Agreement, Aenco shall assign certain of its employees to Aptus Management from time to time to assist Aptus Management with information technology application development and maintenance activities for Aptus Management's affiliates; such employees shall be integrated into Aptus Management's organization only to the extent necessary to carry out such employees specific duties for Aptus Management. Aptus Management shall pay all salary and benefits up to HK\$700,000 per month (approximately US\$89,744 per month); Aenco shall be responsible for the costs associated with any employee relocation required as a result of this agreement. The agreement shall terminate on December 31, 2020, although either party may terminate the agreement upon giving the other party 3-months written notice.

e. In July 2019, Smart Pharmaceutical Limited Partnership, ("SPLP"), a wholly owned subsidiary of the Group, transferred 100,000,000 Smart Pharma Tokens ("SMPT token") to Aenco Solutions Limited, a related party, in exchange of the service to deal with the token creation, offering and 5-years consultancy service. The 100,000,000 SMPT tokens were equivalents to \$300,000.

Aeneas is wholly-owned by Aeneas Group Limited (“AGL”), which in turn is wholly-owned by Aeneas Limited (“AL”). AL is wholly-owned by Jurchen, which is wholly-owned by Mr. Huen, our CEO. Mr. Huen and Mr. Lui both serve as the executive directors of Aeneas and Professor Arner, one of our directors, is a Senior Regulatory and Strategic Advisor for Aeneas. Under his agreement with AGL dated March 12, 2018, Professor Arner shall, among other services, advise the board of AGL with its management, execution of business, and regulatory initiatives of AGL and AL, assist AGL with access to expert networks as appropriate and required. Professor Arner’s compensation thereunder is HK\$234,000 per year (approximately US\$30,000 per year) and Professor Arner is entitled to participate in AGL’s share option plans.

In addition, AGL was one of the selected dealers for our IPO.

CGY Investment Limited

We entered into a consulting agreement with CGY Investment Limited (“CGY”) effective on January 10, 2020. Pursuant to this agreement, CGY shall provide certain consultancy, advisory, and management services to the Group on potential investment projects related to health care or R&D platform; CGY shall be paid a monthly service fee of HK\$104,000 per month (approximately US\$13,333 per month), during the term of the agreement, which is remain in effect unless it is terminated. The agreement may be terminated by either party providing 1-months written notice to the other party.

CGY is 50% held by Seng Fun Yee (Mr. Lui’s spouse), 25% held by Mandy Lui (Mr. Lui’s sister) and 25% held by Adrian Lui (Mr. Lui’s brother). Mr. Lui, President and Executive Director of the Group, controls and/or has substantial influence on the disposition and voting rights of the shares held by his spouse, but no such control over the shares held by his sister or brother. Hence, 50% of the consulting service fee will be deemed as Mr. Lui’s compensation.

Lease

Our lease for our office at Guangdong Investment Tower is a Sub-Tenancy Agreement between Jurchen Investment Corporation and Aptus Management Limited, which is one of our wholly-owned subsidiaries.

The Series A Note Offering

On May 15, 2018, we closed a private financing with certain investors (the “Series A Note Investors”) who purchased an aggregate of \$1,600,400 Series A convertible notes, at a purchase price of \$10,000 per note (the “Series A Notes”), pursuant to a note purchase agreement. Some of the Series A Note Investors are either affiliates of the Company or “related persons,” as such term is defined in Item 404 of Regulation S-K (See “Item 7. Major Shareholders and Related Party Transactions”). We refer to this private placement transaction as the “Series A Note Offering.” The Series A Note Investors entered into a lock-up agreement, pursuant to which they agreed not to sell or otherwise transfer or dispose the Series A Notes or the Class A Ordinary Shares underlying the Series A Notes during the six-month period commencing on the date our Class A Ordinary Shares commence trading on NASDAQ Global Market. The Series A Notes automatically converted into 230,252 Class A Ordinary Shares at the closing of the Offering and at the commencement of trading our Class A Ordinary Shares on NASDAQ Global Market at a conversion price equal to a 56% discount to the actual price per Class A Ordinary Share (“Conversion Price”). Accordingly, the Series A Notes converted into, and we issued an aggregate of 230,252 shares of Class A Ordinary Shares after the IPO closed.

One of the underwriters in the IPO also served as a placement agent for the Series A Note Offering and received: (i) a cash success fee of \$68,516 and (ii) warrants to purchase 12,663 Class A Ordinary Shares, at an exercise price of \$6.95 per share, subject to adjustment (the “Series A Note PA Warrants”). The Series A Note PA Warrants are also exercisable on a cashless basis, at the holder’s discretion.

The issuance and sale of Series A Notes, and the underlying Class A Ordinary Shares to the Series A Note Investors in the Series A Note Offering were made in reliance on an exemption from registration contained in either Regulation D or Regulation S of the Securities Act of 1933, as amended (the “Securities Act”). The securities sold in the Series A Note Offering are not registered by the Registration Statement and have not been registered under the Securities Act, and may be offered or sold only pursuant to an effective registration statement or pursuant to an available exemption from the registration requirements of the Securities Act. However, the Series A Note Investors have piggyback registration rights with respect to the Class A Ordinary Shares underlying the Series A Notes that entitle the Series A Note Investors to request their securities be included in a future Securities Act registration statement, after our IPO, subject to certain exceptions and conditions. However, we decided to include the Class A Ordinary Shares underlying the Series A Notes in the Registration Statement.

The Bond Offering

As described above in Item 5A. Operating Results, on April 6, 2018, we entered into the Bond Subscription Agreement with Peace Range. We repurchased the Bond on April 24, 2019 and the Bond matured and was redeemed on October 25, 2019.

Credit Agreements and Promissory Notes

On August 13, 2019 (the “Effective Date”), Aptorum Therapeutics Limited (“ATL”), one of our wholly-owned subsidiaries, entered into two separate Promissory Notes and Line of Credit Agreements (the “Agreements”) with Aeneas Group Limited (“Aeneas Group”) and Jurchen Investment Corporation (“Jurchen”). The Aeneas Group Agreement and Jurchen Agreement provide ATL with a line of credit up to twelve million dollars (\$12,000,000) and three million dollars (\$3,000,000), respectively (collectively, the “Line of Credit”), representing the maximum aggregate amount of the advances of funds from the Line of Credit that may be outstanding at any time under the Line of Credit (the “Principal Indebtedness”). ATL may draw down from the Line of Credit at any time through the day immediately preceding the third anniversary of the Effective Date (the “Maturity Date”). Interest will be payable on the outstanding Principal Indebtedness at the rate of eight percent (8%) per annum, payable semi-annually in arrears on February 12 and August 12 in each year. ATL may pre-pay in whole or in part, the Principal Indebtedness of the Line of Credit, and all interest accrued at any time prior to the Maturity Date, without penalty. Under the Agreements, in addition to certain standard covenants, we are also not permitted, without the prior written consent of Aeneas Group and Jurchen to (i) liquidate, dissolve or wind-up our business and affairs; (ii) effect any merger or consolidation transaction; (iii) sell, lease, transfer, license or otherwise dispose, in a single transaction or series of related transactions, all or substantially all of our assets; or (iv) consent to any of the foregoing. The Agreements are subject to standard events of default, which if not cured within the agreed upon cure period, permits Aeneas Group or Jurchen, as applicable, to declare the outstanding Principal Indebtedness immediately due and payable, to exercise any other remedy provided for in the Agreements or any other right available to Aeneas Group or Jurchen as provided at law or in equity. Jurchen and Aeneas Group also maintain the right to set-off during the term of the Agreements.

Registered Direct Offering

As described above in Item 5A. Operating Results, Jurchen Investment Corporation, our largest shareholder and wholly owned by Mr. Huen, our Chief Executive Officer, purchased 540,540 Class A Ordinary Shares and Warrants to purchase 540,540 Class A Ordinary Shares in a Registered Direct Offering, which closed on February 28, 2020. The Warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40.

Employment Agreements

See “Item 6. Directors, Senior Management and Employees — C. Board Practices — Employment Agreements”.

C. Interests of Experts and Counsel

Not applicable.

Item 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

From time to time, we are subject to legal proceedings, investigations and claims incidental to the conduct of our business. We are not currently a party to any legal proceeding or investigation which, in the opinion of our management, is likely to have a material adverse effect on our business, financial condition or results of operations.

Dividend Policy

We have never declared or paid cash dividends to our shareholders, and we do not intend to pay cash dividends in the foreseeable future. We intend to reinvest any earnings in developing and expanding our business. Any future determination relating to our dividend policy will be at the discretion of our Board of Directors and will depend on a number of factors, including future earnings, our financial condition, operating results, contractual restrictions, capital requirements, business prospects, our strategic goals and plans to expand our business, applicable law and other factors that our Board of Directors may deem relevant.

Under Cayman Islands law, dividends may be declared and paid only out of funds legally available therefor, namely out of either profit or our share premium account, and provided further that a dividend may not be paid if this would result in our Company being unable to pay its debts as they fall due in the ordinary course of business.

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

Item 9. THE OFFER AND LISTING**A. Offering and Listing Details**

Our Class A Ordinary Shares are currently listed on NASDAQ Global Market under the symbol “APM”.

B. Plan of Distribution

Not applicable.

C. Markets

Our Class A Ordinary Shares are currently listed on NASDAQ Global Market under the symbol “APM”.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. ADDITIONAL INFORMATION**A. Share Capital**

Not applicable.

B. Amended and Restated Memorandum and Articles of Association

The description of our Amended and Restated Memorandum and Articles of Association is incorporated by reference from the Registration Statement. Our amended and restated memorandum and articles of association were filed as Exhibit 3.1 to the Registration Statement and are hereby incorporated by reference into this annual report.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in “Item 4. Information on the Company” or elsewhere in this annual report.

D. Exchange Controls

There are no governmental laws, decrees, regulations or other legislation in the Cayman Islands or Hong Kong that may affect the import or export of capital, including the availability of cash and cash equivalents for use by us, or that may affect the remittance of dividends, interest, or other payments by us to non-resident holders of our ordinary shares, other than withholding tax requirements. There is no limitation imposed by Cayman Islands law, Hong Kong law or our articles of association on the right of non-residents to hold or vote shares.

E. Taxation**Cayman Islands Tax Considerations**

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or brought within, the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties which are applicable to any payments made by or to our Company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of our Class A Ordinary Shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of our Class A Ordinary Shares, nor will gains derived from the disposal of our Class A Ordinary Shares be subject to Cayman Islands income or corporation tax.

No stamp duty is payable in respect of the issue of our Class A Ordinary Shares or on an instrument of transfer in respect of our Class A Ordinary Shares except on instruments executed in, or brought within, the jurisdiction of the Cayman Islands.

Material U.S. Federal Income Tax Considerations for U.S. Holders

The following is a description of the material U.S. federal income tax consequences to U.S. Holders (as defined below) of purchasing, owning and disposing of Class A Ordinary Shares. It is not a comprehensive description of all U.S. federal income tax considerations that may be relevant to a particular person's decision to acquire Class A Ordinary Shares. This discussion applies only to a U.S. Holder that holds a Class A Ordinary Share as a capital asset for U.S. federal income tax purposes (generally, property held for investment). In addition, it does not describe all of the tax consequences that may be relevant in light of a U.S. Holder's particular circumstances, including state and local tax consequences, non-U.S. tax consequences, federal estate or gift tax consequences, alternative minimum tax consequences, the potential application of the provisions of the Code known as the Medicare Contribution Tax, and tax consequences applicable to U.S. Holders subject to special rules, such as:

- banks and other financial institutions;
- insurance companies;
- dealers or traders in securities who use a mark-to-market method of tax accounting;
- persons holding Class A Ordinary Shares as part of a hedging transaction, "straddle," wash sale, conversion transaction or integrated transaction or persons entering into a constructive sale with respect to the Class A Ordinary Shares;
- persons whose "functional currency" for U.S. federal income tax purposes is not the U.S. dollar;
- tax exempt entities, including "individual retirement accounts" and "Roth IRAs";
- former citizens or long-term residents of the United States;
- entities or arrangements classified as partnerships for U.S. federal income tax purposes;
- regulated investment companies or real estate investment trusts;
- persons who acquired our Class A Ordinary Shares pursuant to the exercise of an employee share option or otherwise as compensation;
- persons that own or are deemed to own ten percent or more of our shares; and
- persons holding Class A Ordinary Shares in connection with a trade or business conducted outside the United States.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds Class A Ordinary Shares, the U.S. federal income tax treatment of such partnership and each partner thereof will generally depend on the status of the partner and the activities of the partnership. Partnerships holding Class A Ordinary Shares and partners in such partnerships are encouraged to consult their tax advisors as to the particular U.S. federal income tax consequences of purchasing, holding and disposing of Class A Ordinary Shares.

The discussion is based on the Code, the Treasury Regulations issued thereunder, and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect, or to different interpretation. Such change could materially and adversely affect the tax consequences described below.

For purposes of this discussion, a “U.S. Holder” is a holder who, for U.S. federal income tax purposes, is a beneficial owner of Class A Ordinary Shares and that is:

- (1) an individual citizen or resident of the United States;
- (2) a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia;
- (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- (4) a trust, (i) if a court within the United States is able to exercise primary supervision over its administration and one or more “U.S. persons” (within the meaning of the Code) have the authority to control all of its substantial decisions, or (ii) if a valid election is in effect for the trust to be treated as a U.S. person.

U.S. Holders are encouraged to consult their tax advisors concerning the U.S. federal, state, local and foreign tax consequences of purchasing, owning and disposing of Class A Ordinary Shares in their particular circumstances.

Taxation of Distributions

Subject to the discussion below under “Passive Foreign Investment Company Rules,” a U.S. Holder will be required to include in gross income as dividend income the gross amount of any distributions paid on Class A Ordinary Shares (including any amount of taxes withheld), other than certain *pro rata* distributions of Class A Ordinary Shares, to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current and accumulated earnings and profits would be treated as a non-taxable return of capital to the extent of the U.S. Holder’s adjusted tax basis in the Class A Ordinary Shares and thereafter as a gain from the sale of the Class A Ordinary Shares. However, because we do not calculate our earnings and profits under U.S. federal income tax principles, we expect that distributions generally will be reported to U.S. Holders as dividends.

In case of a U.S. Holder that is a corporation, dividends paid on the Class A Ordinary Shares will be subject to regular corporate rates and will not be eligible for the “dividends received” deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations.

Dividends received by an individual, trust or estate will be subject to taxation at standard tax rates. A reduced income tax rate applies to dividends paid by a “qualified foreign corporations” (if certain holding period requirements and other conditions are met). A non-U.S. corporation generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which includes an exchange of information program or (ii) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. U.S. Treasury Department guidance indicates that our Class A Ordinary Shares, which is listed on the NASDAQ Global Market is readily tradable on an established securities market in the United States. There can be no assurance, however, that our Class A Ordinary Shares will be considered readily tradable on an established securities market in later years.

Non-corporate U.S. Holders will not be eligible for reduced rates of taxation on any dividends received from us if we are a PFIC in the taxable year in which such dividends are paid or in the preceding taxable year (See “Item 10. Additional Information – E. Taxation – Material U.S. Federal Income Tax Considerations for U.S. Holders – Passive Foreign Investment Company Rules” below).

A U.S. Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any foreign withholding taxes imposed on dividends received on the Class A Ordinary Shares. A U.S. Holder who does not elect to claim a foreign tax credit for foreign income tax withheld may instead claim a deduction for U.S. federal income tax purposes in respect of such withholding, but only for a year in which such investor elects to do so for all creditable foreign income taxes. For purposes of calculating the foreign tax credit limitation, dividends paid by us will, depending on the circumstances of the U.S. Holder, be either general or passive income.

While we do not expect to pay dividends in the near future, in the event any dividends are paid and if a dividend is paid in non-U.S. currency, it must be included in a U.S. Holder’s income as a U.S. dollar amount based on the exchange rate in effect on the date such dividend is actually or constructively received, regardless of whether the dividend is in fact converted into U.S. dollars. If the dividend is converted to U.S. dollars on the date of receipt, a U.S. Holder generally will not recognize a foreign currency gain or loss. If the non-U.S. currency is converted into U.S. dollars on a later date, however, the U.S. Holder must include in income any gain or loss resulting from any exchange rate fluctuations. Such gain or loss will generally be ordinary income or loss and will be from sources within the United States for foreign tax credit limitation purposes. U.S. Holders should consult their own tax advisors regarding the tax consequences to them if we pay dividends in non-U.S. currency.

Sale or Other Taxable Disposition of Shares

Subject to the discussion below under “Passive Foreign Investment Company Rules,” gain or loss realized on the sale or other taxable disposition of Class A Ordinary Shares will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the Class A Ordinary Shares for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder’s tax basis in the Class A Ordinary Shares disposed of and the amount realized on the disposition. Long-term capital gain of a non-corporate U.S. Holder is generally taxed at preferential rates. This gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. The deductibility of capital losses is subject to limitations. U.S. Holders are urged to consult their tax advisors regarding the tax consequences if a foreign tax is imposed on the disposition of Class A Ordinary Shares, including the availability of the foreign tax credit under an investor’s own particular circumstances.

A U.S. Holder that receives non-U.S. currency on the disposition of the Class A Ordinary Shares will realize an amount equal to the U.S. dollar value of the foreign currency received on the date of disposition (or in the case of cash basis and electing accrual basis taxpayers, the settlement date) whether or not converted into U.S. dollars at that time. Very generally, the U.S. Holder will recognize currency gain or loss if the U.S. dollar value of the currency received on the settlement date differs from the amount realized with respect to the Class A Ordinary Shares. Any currency gain or loss on the settlement date or on any subsequent disposition of the foreign currency generally will be U.S.-source ordinary income or loss.

Passive Foreign Investment Company Rules

Special U.S. federal income tax rules apply to a U.S. Holder that holds stock in a foreign corporation classified as a PFIC for U.S. federal income tax purposes. In general, a non-U.S. corporation will be classified as a PFIC for any taxable year in which, after applying certain look-through rules, either:

- at least 75% of its gross income for such taxable year is passive income (e.g., dividends, interest, capital gains and rents derived other than in the active conduct of a rental business); or
- at least 50% of its gross assets (determined on the basis of a quarterly average) is attributable to assets that produce passive income or are held for the production of passive income.

We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the equity.

A separate determination must be made after the close of each taxable year as to whether we are a PFIC for that year. As a result, our PFIC status may change. In particular, the total value of our assets generally will be calculated using the market price of our Class A Ordinary Shares, which may fluctuate considerably. Fluctuations in the market price of our Class A Ordinary Shares may result in our being a PFIC for any taxable year.

Due to the amount of restricted and unrestricted cash that we had on hand during our year ending December 31, 2018, we believe that we were classified as a PFIC for that tax year. Depending on the future composition and value of our assets, we may be classified as a PFIC for 2019, as well, and for future years.

If we were to be classified as a PFIC, a U.S. Holder would be subject to different taxation rules depending on whether the U.S. Holder (i) takes no action, (ii) makes an election to treat us as a “Qualified Electing Fund” (a “QEF election”) or (iii) if permitted, makes a “mark-to-market” election with respect to our Class A Ordinary Shares. A U.S. Holder of our Class A Ordinary Shares will also be required under applicable Treasury Regulations to file an annual information return (Form 8621) containing information regarding our company. Additional explanations of the PFIC rules are set forth below; this material is complex and may affect different U.S. Holders differently. Accordingly, U.S. Holders should consult their own tax advisors about the consequences of our company being classified as a PFIC and about what steps, if any, they might take to lessen the tax impact of our PFIC status on them.

A U.S. Holder who does not make a timely QEF or mark-to-market election (a “Non-Electing Holder”), as discussed below, will be subject to special tax rules with respect to any “excess distribution” that you receive and any gain you realize from a sale or other disposition (including a pledge) of Class A Ordinary Shares. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for the Class A Ordinary Shares will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for the Class A Ordinary Shares;
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we became a PFIC, will be treated as ordinary income; and
- the amount allocated to each other year will be subject to the highest tax rate in effect for that year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

It should be noted that, until such time as we make a distribution, there are no tax consequences to Non-Electing Holders. However, if we ever did make a distribution it would in all likelihood be an excess distribution (because we would not have previously made any distributions to holders of Class A Ordinary Shares). At that point, and for all subsequent distributions, the rules described above would apply to Non-Electing Holders. The tax liability for amounts allocated to years prior to the year of disposition or "excess distribution" cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the Class A Ordinary Shares cannot be treated as capital, even if you hold the Ordinary Shares as capital assets.

Certain elections may be available that would result in alternative treatments. The adverse consequences of owning stock in a PFIC could be mitigated if a U.S. Holder makes a valid QEF election (a U.S. Holder which we refer to as an "Electing Holder") which, among other things, would require the Electing Holder to include currently in income its pro rata share of the PFIC's net capital gain and ordinary earnings, if any, for our taxable year that ends with or within the taxable year of the Electing Holder, regardless of whether or not the Electing Holder actually received distributions from us. When an Electing Holder makes a QEF election, its adjusted tax basis in our Class A Ordinary Shares is increased to reflect taxed but undistributed earnings and profits. Distributions of earnings and profits that had been previously taxed will result in a corresponding reduction in the adjusted tax basis in our Class A Ordinary Shares and will not be taxed again once distributed. An Electing Holder would generally recognize capital gain or loss on the sale, exchange or other disposition of our Class A Ordinary Shares.

A U.S. Holder can make a QEF election with respect to any year that we are a PFIC by filing IRS Form 8621 with its U.S. federal income tax return. This election must be made by the deadline (including extensions) for filing the U.S. Holder's federal tax return for the year in question. U.S. Holders should discuss their election alternatives with their own tax advisors. Once an election is made, the Electing Holder is subject to the QEF rules for as long as we are a PFIC.

It should be noted that in order to make a QEF election a U.S. Holder needs information from us concerning our PFIC status and our financial results for the year. We cannot assure our U.S. Holders that we will provide such information.

As an alternative to making a QEF election, a U.S. Holder may make a "mark-to-market" election with respect to our Class A Ordinary Shares provided our Class A Ordinary Shares are treated as "marketable stock." The Class A Ordinary Shares generally will be treated as marketable stock if they are regularly traded on a "qualified exchange or other market" (within the meaning of applicable Treasury Regulations) on at least 15 days during each calendar quarter (other than in de minimis amounts).

If a U.S. Holder makes an effective mark-to-market election, for each taxable year that we are a PFIC, the U.S. Holder will include as ordinary income the excess of the fair market value of its Class A Ordinary Shares at the end of the year over its adjusted tax basis in the Class A Ordinary Shares. You will be entitled to deduct as an ordinary loss in each such year the excess of your adjusted tax basis in the Class A Ordinary Shares over their fair market value at the end of the year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. A U.S. Holder's adjusted tax basis in the Class A Ordinary Shares will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. In addition, upon the sale or other disposition of your Class A Ordinary Shares in a year that we are PFIC, any gain will be treated as ordinary income and any loss will be treated as ordinary loss, but only to the extent of the net amount of previously included income as a result of the mark-to-market election.

If a U.S. Holder makes a mark-to-market election, it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the Class A Ordinary Shares are no longer regularly traded on a qualified exchange or other market, or the IRS consents to the revocation of the election. You are urged to consult your tax advisor about the availability of the mark-to-market election, and whether making the election would be advisable in your particular circumstances.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the IRS.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders may be required to report information relating to the Class A Ordinary Shares, subject to certain exceptions (including an exception for Class A Ordinary Shares held in accounts maintained by certain U.S. financial institutions). U.S. Holders should consult their tax advisors regarding their reporting obligations with respect to their purchase, ownership and disposition of the Class A Ordinary Shares.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We have previously filed the Registration Statement with the SEC.

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at Judiciary Plaza, 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules of the Exchange Act prescribing, among other things, the furnishing and content of proxy statements to shareholders, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We also maintain a corporate website at www.aptorumgroup.com. Information contained on, or that can be accessed through, our website does not constitute a part of this report.

I. Subsidiary Information

For a listing of our subsidiaries, see “Item 4. Information on the Company — A. History and Development of the Company.”

Item 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For purposes of Item 11, reference to the “Group” means Aptorum Group Limited and all of its subsidiaries.

Foreign Exchange Risk

Currency risk is the risk that the value of financial assets or liabilities will fluctuate due to changes in foreign exchange rates.

Currency risk sensitivity analysis

At December 31, 2019, 2018 and 2017, the Group has no significant foreign currency risk because its business is principally conducted in Hong Kong and most of the transactions are denominated in Hong Kong dollar. Since the Hong Kong dollar is pegged to the United States dollar, the Group’s exposure to foreign currency risk in respect of the balances denominated in Hong Kong dollars is considered to be minimal.

Credit Risk

Financial assets which potentially subject the Group to concentrations of credit risk consist principally of bank deposits and balances.

The Group takes on exposure to credit risk on cash and restricted cash balances held with HSBC, DBS Bank Ltd, Hong Kong Branch, Industrial and Commercial Bank of China (Macao) Limited, Bank of China (Hong Kong) Limited, Mitsubishi UFJ Financial Group and Silicon Valley Bank for the purposes of payments of Group expenses.

All transactions in listed securities are settled or paid for upon delivery using approved and reputable brokers. The risk of default is considered minimal, as delivery of securities sold is only made when the broker has received payment. Payment is made on a purchase when the securities have been received by the broker. The trade will fail if either party fails to meet its obligation. The Group limits its exposure to credit risk by transacting all of its securities and contractual commitment activities with broker-dealers, banks and regulated exchanges with high credit ratings and that the Group considers to be well established.

Liquidity Risk

Liquidity risk is the risk that the Group will encounter difficulty in raising funds to meet commitments associated with financial assets and liabilities. Liquidity risk may result from an inability to sell a financial asset quickly at an amount close to its fair value.

The Group invests in private equities which are generally unquoted and not readily marketable. The Group manages its liquidity risk by setting investment limits on unlisted securities that cannot be readily disposed of. Investment of the Group’s assets in unquoted securities may restrict the ability of the Group to dispose of its investment at a price and time it wishes to do so.

Interest Rate Risk

Interest rate risk arises from the possibility that changes in interest rates will affect future cash flows or the fair values of financial instruments.

Interest rate risk sensitivity analysis

The Group’s cash held with the Cash Custodian and the Custodian are exposed to interest rate risk. However, Management considers the risk to be minimal as they are short-term with terms less than one month.

Inflation Risk

In recent years, inflation has not had a material impact on our results of operations.

Item 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Items 12.D.3 and 12.D.4 of this Item 12 is not applicable, as the Company does not have any American Depositary Shares; all other applicable information required by this Item 12 is included in Exhibit 2.3.

Part II

Item 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

Item 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

See “Item 10. Additional Information” for a description of the rights of securities holders, which remain unchanged.

Use of Proceeds

The following “Use of Proceeds” information relates to the Registration Statement (File No. 333-227198), which was initially filed on September 5, 2018 and which became effective on December 3, 2018, in relation to our initial public offering of 761,419 Class A Ordinary Shares, at an initial offering price of \$15.8 per share, and the issuance to the underwriter in the initial public offering of warrants to purchase up to 38,071 Class A Ordinary Shares. Our initial public offering closed in December 17, 2018, for which Boustead Securities LLC, China Renaissance Securities (HK) Limited and AMTD Global Markets Limited served as underwriters.

We received gross proceeds of approximately \$12.0 million from our initial public offering. As of April 29, 2020, in addition to our expenses relating to our IPO, all remaining IPO proceeds have been used on our lead projects and other projects, as described herein.

Item 15. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of the effectiveness of our disclosure controls and procedures, which is defined in Rules 13a-15(e) of the Exchange Act, as of December 31, 2019. Based on that evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures, as of December 31, 2019, were effective.

(b) Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with Generally Accepted Accounting Principles (GAAP) in the United States of America and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of our company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with GAAP, and that receipts and expenditures of our company are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of the unauthorized acquisition, use or disposition of our company’s assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules as promulgated by the Securities and Exchange Commission, our management including our Chief Executive Officer and Chief Financial Officer assessed the effectiveness of internal control over financial reporting as of December 31, 2019 using the criteria set forth in the report “Internal Control—Integrated Framework (2013)” published by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2019.

In connection with the audit of our financial statements for the year ended December 31, 2018 and the period March 1, 2017 through December 31, 2017, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting, as defined in the standards established by the Public Company Accounting Oversight Board of the United States. The material weakness identified was the lack of dedicated resources to take responsibility for the finance and accounting functions and the preparation of financial statements in compliance with generally accepted accounting principles in the United States, or U.S. GAAP.

In 2019, we took actions to remediate the abovementioned material weakness, and we believe we have remediated the material weakness by implementing the following measures:

- provide trainings to staff regarding to the preparation of financial statements in compliance with generally accepted accounting principles in the United States;
- change to a new and well-established accounting system to enhance effectiveness and financial and system control;
- establish clear roles and responsibilities for accounting and financial reporting staff to address finance and accounting issues; and
- continue to monitor the improvement on internal control over financial reporting.

As of December 31, 2019, we determined that the aforementioned measures remediated the material weakness. However, since we are still in the process of replenishing and building up a qualified finance and accounting team with sufficient dedicated resources, our management assessed that the deficiency related to the lack of dedicated resources to take responsibility for the finance and accounting functions and the preparation of financial statements in compliance with generally accepted accounting principles in the United States, or U.S. GAAP, still existed as of December 31, 2019. Therefore, based on the definition of “material weakness” and “significant deficiency” in the standards established by the Public Company Accounting Oversight Board of the United States, our management concluded that the deficiency now only rises to the level of a significant deficiency.

We cannot assure you that we will not identify additional material weaknesses or significant deficiencies in the future. See “Item 3. Key Information—D. Risk Factors—Risks Related to Our Industry, Business and Operation — If we fail to establish and maintain proper internal financial reporting controls, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.”

Notwithstanding there is a significant deficiency identified as described above, we believe that our consolidated financial statements contained in this annual report on Form 20-F fairly present our financial position, results of operations and cash flows for the years covered thereby in all material respects.

(c) Attestation Report of the Company’s Registered Public Accounting Firm

We did not include an attestation report of the company’s registered public accounting firm due to rules of the SEC where domestic and foreign registrants that are non-accelerated filers, which we are, and “emerging growth companies” which we also are, are not required to provide the auditor attestation report.

(d) Changes in Internal Control over Financial Reporting

Other than those disclosed above in (b) Management’s Annual Report on Internal Control over Financial Reporting, there were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report on Form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

L E 16. [RESERVED]

Item 16A. AUDIT COMMITTEE FINANCIAL EXPERT

We have one financial expert as of the date of this report. Our Board of Directors has determined that Mr. Charles Bathurst, Chair of our audit committee, qualifies as an “audit committee financial expert” as defined in the SEC rules and satisfies the financial sophistication requirements of The NASDAQ Global Market. Mr. Bathurst is “independent” as that term is defined in the rules of the SEC and the applicable rules of the NASDAQ Global Market.

Item 16B. CODE OF ETHICS

The Company’s Code of Ethics became effective on the effective date of the Registration Statement. The Code of Ethics is incorporated by reference to exhibit 14.1 of the Registration Statement.

Item 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by our principal external auditors, for the periods indicated.

	For the years ended December 31,	
	2019	2018
	(In thousand)	
Audit fees	\$ 154	\$ 263
Audit-related fees	65	-
Tax fees	-	-
All other fees	-	-
Total	\$ 219	\$ 263

“Audit fees” represents the aggregate fees billed or to be billed for each of the fiscal years listed for professional services rendered by our principal auditor for the audit of our annual financial statements.

“Audit-related fees” are the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit and are not reported under audit fees. These fees primarily include review of documents filed with the SEC.

“Tax fees” include fees for professional services rendered by our principal auditor for tax compliance and tax advice on actual or contemplated transactions.

“Other fees” include fees for services rendered by our independent registered public accounting firm with respect to other matters not reported under “Audit fees”, “Audit-related fees” and “Tax fees”.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by our principal auditor including audit services, audit-related services, tax services and other services.

Item 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

Item 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

Item 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT

Not applicable.

Item 16G. CORPORATE GOVERNANCE

See “Item 6. Directors, Senior Management and Employees” for more information.

Item 16H. MINE SAFETY DISCLOSURE

Not applicable.

Part III

Item 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

Item 18. FINANCIAL STATEMENTS

The consolidated financial statements of Aptorum Group Limited, and its subsidiaries are included at the end of this annual report.

Item 19. EXHIBITS

EXHIBIT INDEX

Exhibit No.	Description
1.1	Second Amended and Restated Articles of Association *
2.1	Registrant's Specimen Certificate for Ordinary Shares*
2.2	Form of Underwriter's Warrant+++
2.3	Description of Securities registered under Section 12 of the Exchange Act of 1934, as amended**
2.4	Form of Warrant+
4.1	Form of Underwriting Agreement+++
4.2	Appointment Letter between the Company and Ian Huen (Founder, Chief Executive Officer & Executive Director), dated September 25, 2017 *
4.3	Employment Letter between the Company and Sabrina Khan (Chief Financial Officer), dated September 1, 2017 *
4.4	Addendum to Employment Letter between Company and Sabrina Khan (Chief Financial Officer) dated April 24, 2018 *
4.5	Appointment Letter between the Company and Darren Lui (Chief Business Officer, President & Director), dated September 25, 2017 *
4.6	Employment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated August 31, 2017 *
4.7	Addendum to Appointment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated September 25, 2017 *
4.8	Second Addendum to Appointment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated October 30, 2017 *
4.9	Third Addendum to Appointment Letter between the Company and Clark Cheng (Chief Medical Officer & Director), dated January 2, 2018 *
4.10	Appointment letter between the Company and Keith Chan (former Chief scientific officer) (Terminated March 13, 2019)*
4.11	Appointment Letter between the Company and Charles Bathurst (Independent Non-Executive Director), dated September 24, 2017 *
4.12	Appointment Letter between the Company and Mirko Scherer (Independent Non-Executive Director), dated September 24, 2017 *
4.13	Employment Agreement between the Company and Justin Wu (Independent Non-Executive Director), dated September 18, 2017 *

4.14 [Employment Agreement between the Company and Douglas Arner \(Independent Non-Executive Director\), dated February 13, 2018 *](#)

4.15 [Management Agreement between the Company and Guardian Capital Management Limited, dated March 1, 2017 *](#)

4.16 [Consulting Agreement between the Company and GloboAsia, LLC \(includes provisions for the appointment of Keith Chan as Chief Scientific Officer\) dated August 18, 2017 * \(Terminated March 13, 2019\)](#)

4.17 [Management Agreement between the Company and APTUS CAPITAL LIMITED, dated October 26, 2010 *](#)

4.18 [First Addendum to the Management Agreement between the Company and APTUS CAPITAL LIMITED, dated February 10, 2012 *](#)

4.19 [Second Addendum to the Management Agreement between the Company and APTUS CAPITAL LIMITED, December 9, 2016 *](#)

4.20 [Subscription Agreement between the Company and Peace Range Limited, dated April 6, 2018 *](#)

4.21 [Share Charge Agreement between the Company, Jurchen Investment Corporation and Peace Range Limited, dated April 25, 2018 * \(Terminated March 12, 2019\)](#)

4.22 [Deed of Guarantee of Jurchen Investment Corporation, acknowledged by Peace Range Limited, dated April 25, 2018 *](#)

4.23 [Charge Account Agreement between the Company and Peace Range Limited, dated April 25, 2018 *](#)

4.24 [Bond Certificate between the Company and Peace Range Limited, dated April 25, 2018 *](#)

4.25 [Escrow Agreement between the Company and Peace Range Limited, dated April 25, 2018* \(Terminated February 22, 2019\)](#)

4.26 [2017 Share Option Plan *](#)

4.27 [Form of Securities Purchase Agreement for the Series A Convertible Promissory Notes, dated May 15, 2018 *](#)

4.28 [Lock-up Agreement for Series A Convertible Promissory Notes, dated May 15, 2018 *](#)

4.29 [Service Agreement Between Covar Pharmaceuticals Incorporated and Videns Incorporation Limited*](#)

4.30 [Appointment Letter and Addendum to Service Agreement with Covar Pharmaceuticals Incorporated and Dr. Kwok Chow dated December 15, 2017*](#)

4.31 [Appointment Letter and Addendum to Service Agreement with Covar Pharmaceuticals Incorporated and Mr. Austin Feedman dated December 26, 2017*](#)

4.32 [Consulting Agreement between the Company and GloboAsia, LLC \(includes provisions for the appointment of Keith Chan as member of the Scientific Advisory Board\) dated March 13, 2019^{\(5\)}](#)

4.33 [Exclusive Patent License Agreement for ALS-4 dated October 18, 2017^{\(3\)}](#)

4.34 [First Amendment to Exclusive License Agreement for ALS-4 dated June 7, 2018 *](#)

4.35 [Second Amendment to Exclusive License Agreement for ALS-4 dated July 10, 2019**^{\(6\)}](#)

4.36 [Exclusive License Agreement for ALS-4 dated January 11, 2019^{\(4\)}](#)

4.37 [Employment Agreement with Dr. Lee dated March 13, 2019+:](#)

4.38 [Employment Agreement with Dr. Ng, dated March 13, 2019+:](#)

4.39 [Master Collaboration Agreement by and between the Company, A*ccelerate Technologies Pte. Ltd, and Acneas Capital Limited dated April 24, 2019.\(1\)](#)

4.40 [Bond Repurchase Agreement dated April 24, 2019.\(1\)](#)

4.41 [Form of Line of Credit Agreement \(2\)](#)

4.42 [Form of Promissory Note \(2\)](#)

4.43 [Form of Securities Purchase Agreement[†]](#)
4.44 [Consulting agreement with CGY Investment Limited effective on January 10, 2020**](#)
4.45 [Distribution and Marketing Agreement between Nativus Life Sciences Limited and Multipak Limited**](#)
4.46 [Administrative Consultant Services Agreement with Aeneas Management Limited dated January 1, 2019**](#)
4.47 [Secondment Agreement between the Company and Aenco Limited dated January 1, 2019**](#)
4.48 [Secondment Agreement \(2\) between the Company and Aenco Limited dated April 1, 2020**](#)
8.1 [List of Subsidiaries**](#)
12.1 [Certification of Chief Executive Officer Pursuant to Rule 13a-14\(g\)/15d-14\(g\)**](#)
12.2 [Certification of Chief Financial Officer Pursuant to Rule 13a-14\(g\)/15d-14\(g\)**](#)
13.1 [Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002***](#)
15.1 [Consent of Marcum Bernstein & Pinchuk LLP**](#)
99.1 [Code of Business Ethics *](#)
101.INS XBRL Instance Document**
101.SCH XBRL Taxonomy Extension Schema Document**
101.CAL XBRL Taxonomy Extension Calculation Linkbase Document**
101.DEF XBRL Taxonomy Extension Definition Linkbase Document**
101.LAB XBRL Taxonomy Extension Label Linkbase Document**
101.PRE XBRL Taxonomy Extension Presentation Linkbase Document**

*** Furnished with this annual report on Form 20-F

** Filed with this annual report on Form 20-F

* Incorporated by reference to our Registration Statement Filed on Form F-1 on September 5, 2018

+++ Incorporated by reference to our Registration Statement Filed on Form F-1 on November 15, 2018

++ Incorporated by reference to our Current Report on Form 6-K filed on April 1, 2019

+ Incorporated by reference to our Current Report on Form 6-K filed on February 26, 2020

(1) Incorporated by reference to our Current Report on Form 6-K filed on April 24, 2019

(2) Incorporated by reference to our Current Report on Form 6-K filed on August 14, 2019

(3) Incorporated by reference to our Registration Statement Filed on Form F-1 on September 5, 2018; portions of the exhibit were previously omitted in reliance on the confidential treatment provisions available pursuant to revised paragraph 4(a) of Instructions as to Exhibits of Form 20-F.

(4) Incorporated by reference to our annual report on Form 20-F filed on April 15, 2019; portions of the exhibit were previously omitted in reliance on the confidential treatment provisions available pursuant to revised paragraph 4(a) of Instructions as to Exhibits of Form 20-F.

(5) Incorporated by reference to our annual report on Form 20-F filed on April 15, 2019.

(6) Certain information from this exhibit has been excluded from this exhibit because it both (i) is not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Aptorum Group Limited

Date: April 29, 2020

By:

/s/ Ian Huen

Ian Huen

Chief Executive Officer,

Chairman of the Board of Directors

(Principal Executive Officer)

/s/ Sabrina Khan

Sabrina Khan

Chief Financial Officer

Principal Accounting and Financial Officer

APTORUM GROUP LIMITED
Financial Statements

Table of Contents

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets (Successor Basis) as of December 31, 2019 and 2018	F-3
Consolidated Statements of Operations and Comprehensive Loss (Successor Basis) for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017	F-4
Statement of Operations (Predecessor Basis) for the period January 1, 2017 through February 28, 2017	F-5
Consolidated Statements of Equity (Successor Basis) for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017	F-6
Statement of Changes in Net Assets (Predecessor Basis) for the period January 1, 2017 through February 28, 2017	F-7
Consolidated Statements of Cash Flows (Successor Basis) for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017	F-8
Statement of Cash Flows (Predecessor Basis) for period January 1, 2017 through February 28, 2017	F-9
Notes to Consolidated Financial Statements	F-10



REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

Aptorum Group Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets (successor basis) of Aptorum Group Limited (the "Company") as of December 31, 2019 and 2018, the related consolidated statements (successor basis) of operations and comprehensive loss, equity and cash flows for each of the two years in the period ended December 31, 2019, and the period March 1, 2017 through December 31, 2017, the statements (predecessor basis) of operations, changes in net assets, and cash flows for the period January 1, 2017 through February 28, 2017, and the related notes, (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, the period March 1, 2017 through December 31, 2017, and the period January 1, 2017 through February 28, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum Bernstein & Pinchuk . LP

Marcum Bernstein & Pinchuk LLP

We have served as the Company's auditor since 2017
New York, New York
April 29, 2020

APTORUM GROUP LIMITED
CONSOLIDATED BALANCE SHEETS (SUCCESSOR BASIS)
December 31, 2019 and 2018
(Stated in U.S. Dollars)

ASSETS**Current assets:**

Cash
Restricted cash
Digital currencies
Accounts receivable
Inventories
Marketable securities, at fair value
Investments in derivatives
Amounts due from related parties
Due from brokers
Other receivables and prepayments

Total current assets

Property, plant and equipment, net
Non-marketable investments
Intangible assets, net
Amounts due from related parties
Long-term deposits
Other non-current asset

Total Assets**LIABILITIES AND EQUITY****LIABILITIES****Current liabilities:**

Amounts due to related parties
Accounts payable and accrued expenses
Finance lease payable, current portion
Warrant liabilities
Convertible debts

Total current liabilities

Finance lease payable, non-current portion
Loan payables to related parties

Total Liabilities**Commitments and contingencies****EQUITY**

Class A Ordinary Shares (\$1.00 par value; 60,000,000 shares authorized, 6,597,362 shares issued and outstanding at December 31, 2019 and 6,537,269 shares issued and outstanding at December 31, 2018, respectively)

Class B Ordinary Shares (\$1.00 par value; 40,000,000 shares authorized, 22,437,754 shares issued and outstanding as at December 31, 2019 and 2018)

Additional paid-in capital
Accumulated other comprehensive loss
Accumulated deficit

Total equity attributable to the shareholders of Aptorum Group Limited

Non-controlling interests

Total equity**Total Liabilities and Equity**

	December 31, 2019	December 31, 2018
\$	5,189,003	12,006,624
	104,170	14,100,614
	1,539	-
	40,543	2,827
	34,185	30,642
	1,063,111	1,014,338
	203,320	115,721
	962	169,051
	317,005	818,968
	1,079,043	464,156
	8,032,881	28,722,941
	7,093,035	4,260,602
	7,112,180	7,094,712
	1,311,683	1,409,540
	50,000	50,000
	294,606	3,417,178
	59,833	119,667
\$	23,954,218	45,074,640
\$	41,593	33,417
	2,586,527	1,247,147
	46,555	43,877
	-	753,118
	-	10,107,306
	2,674,675	12,184,865
	97,319	143,873
	6,330,472	-
\$	9,102,466	12,328,738
	-	-
\$	6,597,362	6,537,269
	22,437,754	22,437,754
	24,887,624	23,003,285
	(5,552)	(1,484,688)
	(37,555,980)	(17,379,185)
	16,361,208	33,114,435
	(1,509,456)	(368,533)
	14,851,752	32,745,902
\$	23,954,218	45,074,640

See accompanying notes to the consolidated financial statements.

APTURUM GROUP LIMITED
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(SUCCESSOR BASIS)
For Years Ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017
(Stated in U.S. Dollars)

	Year Ended December 31, 2019	Year Ended December 31, 2018	March 1, 2017 through December 31, 2017
Revenue			
Healthcare service income	\$ 535,166	\$ 383,450	\$ -
Operating expenses			
Cost of healthcare service	(794,545)	(318,011)	-
Research and development expenses	(6,939,051)	(3,101,432)	(2,560,323)
General and administrative fees	(7,373,425)	(4,919,626)	(1,480,093)
Legal and professional fees	(3,405,705)	(1,811,770)	(1,395,490)
Other operating expenses	(220,891)	(560,709)	(257,177)
Total expenses	<u>(18,733,617)</u>	<u>(10,711,548)</u>	<u>(5,693,083)</u>
Other (loss) income			
(Loss) gain on investments in marketable securities, net	(81,839)	501,522	3,912,500
Gain on non-marketable investments	1,147,190	-	-
Gain (loss) on investments in derivatives, net	87,599	(974,444)	(827,501)
Gain on use of digital currencies	46,717	-	-
Gain on extinguishment of convertible debts	1,198,490	-	-
Changes in fair value of warrant liabilities	(866,300)	124,726	-
Interest (expense) income, net	(3,699,672)	(4,458,191)	44,269
Rental income	16,868	-	-
Dividend income	-	-	2,308
Sundry income	232,460	-	-
Total other (loss) income, net	<u>(1,918,487)</u>	<u>(4,806,387)</u>	<u>3,131,576</u>
Net loss	<u>(20,116,938)</u>	<u>(15,134,485)</u>	<u>(2,561,507)</u>
Less: net loss attributable to non-controlling interests	<u>(1,430,176)</u>	<u>(302,762)</u>	<u>(14,045)</u>
Net loss attributable to Aptorum Group Limited	<u>\$ (18,686,762)</u>	<u>\$ (14,831,723)</u>	<u>\$ (2,547,462)</u>
Net loss per share – basic and diluted	\$ (0.64)	\$ (0.53)	\$ (0.09)
Weighted-average shares outstanding – basic and diluted	<u>29,008,445</u>	<u>27,909,788</u>	<u>26,963,435</u>
Net loss	\$ (20,116,938)	\$ (15,134,485)	\$ (2,561,507)
Other Comprehensive loss			
Unrealized loss on investments in available-for-sale securities	-	(1,122,251)	(367,782)
Exchange differences on translation of foreign operations	(10,897)	5,345	-
Other Comprehensive loss	<u>(10,897)</u>	<u>(1,116,906)</u>	<u>(367,782)</u>
Comprehensive loss	<u>(20,127,835)</u>	<u>(16,251,391)</u>	<u>(2,929,289)</u>
Less: comprehensive loss attributable to non-controlling interests	<u>(1,430,176)</u>	<u>(302,762)</u>	<u>(14,045)</u>
Comprehensive loss attributable to the shareholders of Aptorum Group Limited	<u>(18,697,659)</u>	<u>(15,948,629)</u>	<u>(2,915,244)</u>

See accompanying notes to the consolidated financial statements.

APTORUM GROUP LIMITED
STATEMENT OF OPERATIONS (PREDECESSOR BASIS)
For the Period January 1, 2017 through February 28, 2017
(Stated in U.S. Dollars)

	January 1, 2017 through February 28, 2017
Investment income	
Dividend income from unaffiliated issuers	\$ -
Interest income	3,011
Total investment income	<u>3,011</u>
Expenses	
General and administrative fees	17,516
Management fees	108,958
Legal and professional fees	98,646
Other operating expenses	1,907
Total expenses	<u>227,027</u>
Net investment loss	<u>\$ (224,016)</u>
Realized and unrealized losses	
Net realized losses on investments in unaffiliated issuers	\$ (15,327)
Net change in unrealized depreciation on investments	
Aptorum Therapeutics - related party	(98,434)
Unaffiliated issuers	<u>(288,307)</u>
Net realized and unrealized losses	<u>(402,068)</u>
Net decrease in net assets resulting from operations	<u>\$ (626,084)</u>

See accompanying notes to the consolidated financial statements.

APTURUM GROUP LIMITED
CONSOLIDATED STATEMENTS OF EQUITY (SUCCESSOR BASIS)
For Years Ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017
(Stated in U.S. Dollars)

	Ordinary shares		Class A Ordinary Shares		Class B Ordinary Shares		Additional Paid-in Capital	Accumulated deficit	Accumulated other comprehensive loss	Non-controlling interests	Total
	Shares	Amount	Shares	Amount	Shares	Amount	Amount	Amount	Amount	Amount	Amount
Balance, March 1, 2017	25,657,110	\$ 25,657,110	-	\$ -	-	\$ -	(1,168,448)	\$ -	\$ -	\$ -	24,488,662
Proceeds from issuance of shares	2,207,025	2,207,025	-	-	-	-	6,394,976	-	-	-	8,602,001
Converted from ordinary shares	(27,864,135)	(27,864,135)	5,426,381	5,426,381	22,437,754	22,437,754	-	-	-	-	-
Unrealized loss on investments in available-for-sale securities	-	-	-	-	-	-	-	-	(367,782)	-	(367,782)
Gain on disposal of entity under common control	-	-	-	-	-	-	67,874	-	-	-	67,874
Net loss	-	-	-	-	-	-	-	(2,547,462)	-	(14,045)	(2,561,507)
Balance, December 31, 2017	-	\$ -	5,426,381	\$ 5,426,381	22,437,754	\$ 22,437,754	\$ 5,294,402	\$ (2,547,462)	\$ (367,782)	\$ (14,045)	30,229,248
Issuance of initial public offering of ordinary shares on December 17, 2018 at \$15.8 per share, net of underwriting discount and offering expenses	-	-	761,419	761,419	-	-	9,536,631	-	-	-	10,298,050
Proceeds from non-controlling interest	-	-	-	-	-	-	51,727	-	-	(51,726)	1
Converted from convertible debts	-	-	349,469	349,469	-	-	2,683,839	-	-	-	3,033,308
Unrealized loss on investments in available-for-sale securities	-	-	-	-	-	-	-	-	(1,122,251)	-	(1,122,251)
Exchange difference on translation of foreign operation	-	-	-	-	-	-	-	-	5,345	-	5,345
Beneficial conversion feature	-	-	-	-	-	-	5,436,686	-	-	-	5,436,686
Net loss	-	-	-	-	-	-	-	(14,831,723)	-	(302,762)	(15,134,485)
Balance, December 31, 2018	-	\$ -	6,537,269	\$ 6,537,269	22,437,754	\$ 22,437,754	\$ 23,003,285	\$ (17,379,185)	\$ (1,484,688)	\$ (368,533)	32,745,902
Adjustment to opening balance of equity	-	-	-	-	-	-	-	(1,490,033)	1,490,033	-	-
Balance, January 1, 2019	-	\$ -	6,537,269	\$ 6,537,269	22,437,754	\$ 22,437,754	\$ 23,003,285	\$ (18,869,218)	\$ 5,345	\$ (368,533)	32,745,902
Issuance of shares to non-controlling interest	-	-	-	-	-	-	10,672	-	-	(10,672)	-
Issuance of tokens	-	-	-	-	-	-	-	-	-	300,000	300,000
Reacquisition of convertible bonds	-	-	-	-	-	-	(1,298,490)	-	-	-	(1,298,490)
Disposal of a subsidiary	-	-	-	-	-	-	-	-	-	(75)	(75)
Share-based compensation	-	-	-	-	-	-	1,612,832	-	-	-	1,612,832
Exercise of warrants	-	-	60,093	60,093	-	-	1,559,325	-	-	-	1,619,418
Exchange difference on translation of foreign operation	-	-	-	-	-	-	-	-	(10,897)	-	(10,897)
Net loss	-	-	-	-	-	-	-	(18,686,762)	-	(1,430,176)	(20,116,938)
Balance, December 31, 2019	-	\$ -	6,597,362	\$ 6,597,362	22,437,754	\$ 22,437,754	\$ 24,887,624	\$ (37,555,980)	\$ (5,552)	\$ (1,509,456)	14,851,752

See accompanying notes to the consolidated financial statements.

APTORUM GROUP LIMITED
STATEMENT OF CHANGES IN NET ASSETS (PREDECESSOR BASIS)
For the Period January 1, 2017 through February 28, 2017
(Stated in U.S. Dollars)

	January 1, 2017 through February 28, 2017
Operations	
Net investment losses	\$ (224,016)
Net realized losses	(15,327)
Net change in unrealized depreciation	(386,741)
Net decrease in net assets resulting from operations	<u>(626,084)</u>
Distributions to shareholders	
Equalization payable	9,663
Return of capital	<u>(9,663)</u>
Total distributions	<u>-</u>
Total decrease in net assets	(626,084)
Net assets	
Beginning of period	25,114,746
End of period	<u>\$ 24,488,662</u>

See accompanying notes to the consolidated financial statements.

APTORUM GROUP LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS (SUCCESSOR BASIS)
For Years Ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017
(Stated in U.S. Dollars)

	Year Ended December 31, 2019	Year Ended December 31, 2018	March 1, 2017 through December 31, 2017
Cash flows from operating activities			
Net loss	\$ (20,116,938)	\$ (15,134,485)	\$ (2,561,507)
Adjustments to reconcile net loss to net cash used in operating activities			
Amortization and depreciation	1,299,618	682,292	58,903
Share-based compensation	1,612,832	-	-
Loss (gain) on investments in marketable securities, net	81,839	(501,522)	(3,912,500)
Gain on non-marketable investments	(1,147,190)	-	-
(Gain) loss on investments in derivatives, net	(87,599)	974,444	827,501
Changes in fair value of warrant liabilities	866,300	(124,726)	-
Gain on use of digital currencies	(46,717)	-	-
Settlement of service fee by digital currencies and tokens	437,178	-	-
Gain on extinguishment of convertible debts	(1,198,490)	-	-
Interest income	(79,558)	(108,512)	-
Interest expense and accretion of convertible debts	3,769,263	4,559,714	-
Accretion of finance lease obligation	9,967	6,989	-
Changes in operating assets and liabilities			
Accounts receivable	(37,716)	(2,827)	-
Inventories	(3,543)	(30,642)	-
Other receivables and prepayments	(427,541)	(45,911)	(303,925)
Other non-current asset	-	(179,500)	-
Long-term deposits	55,429	(111,951)	(20,092)
Due from brokers	501,963	751	(54,158)
Amounts due from related parties	168,089	(79,204)	-
Amounts due to related parties	(26,060)	1,004	-
Accounts payable and accrued expenses	986,241	58,555	183,083
Net cash used in operating activities	<u>(13,382,633)</u>	<u>(10,035,531)</u>	<u>(5,782,695)</u>
Cash flows from investing activities			
Purchase of digital currencies	(200,000)	-	-
Advances to related parties	-	-	(186,898)
Purchases of intangible assets	(70,109)	(417,794)	(968,730)
Purchases of property, plant and equipment	(837,062)	(5,646,505)	(2,090,721)
Proceeds from sales of investment securities	999,110	2,312	16,049,067
Disbursement of a loan to a third party	(1,400,000)	(3,000,000)	-
Repayment of a loan from a third party	1,400,000	3,000,000	-
Net cash (used in) provided by investing activities	<u>(108,061)</u>	<u>(6,061,987)</u>	<u>12,802,718</u>
Cash flows from financing activities			
Loan from related parties	6,330,472	-	-
Payment for settlement of convertible debts	(13,600,000)	-	-
Proceeds from issuance of convertible debts	-	16,120,400	480,000
Proceeds from issuance of shares	-	11,054,319	8,602,001
Payments of initial public offering costs	-	(538,122)	-
Payments for debt issuance costs	-	(1,099,316)	-
Payment of finance lease obligations	(53,843)	(58,332)	-
Net cash (used in) provided by financing activities	<u>(7,323,371)</u>	<u>25,478,949</u>	<u>9,082,001</u>
Net (decrease) increase in cash and restricted cash	(20,814,065)	9,381,431	16,102,024
Cash and restricted cash – Beginning of period	26,107,238	16,725,807	623,783
Cash and restricted cash – End of period	<u>5,293,173</u>	<u>\$ 26,107,238</u>	<u>16,725,807</u>
Supplemental disclosures of cash flow information			
Interest paid	\$ 557,333	\$ 606,989	\$ -
Income taxes paid	\$ -	\$ -	\$ -
Proceeds in broker accounts	\$ 999,110	\$ 640,227	\$ -
Non-cash operating, investing and financing activities			
Issuance of token in exchange of services	\$ 300,000	\$ -	\$ -
Net settlement of related party balances	\$ -	\$ 164,973	\$ -
Equipment acquired through finance lease	\$ -	\$ 239,093	\$ -
Conversion of convertible debts	\$ -	\$ 3,033,308	\$ -
Settlement of service fee by digital currencies and tokens	\$ 437,178	\$ -	\$ -
Reconciliation of cash and restricted cash			
Cash	\$ 5,189,003	\$ 12,006,624	\$ 16,245,807
Restricted cash	104,170	14,100,614	480,000
Total cash and restricted cash shown in the consolidated statements of cash flows	<u>\$ 5,293,173</u>	<u>\$ 26,107,238</u>	<u>\$ 16,725,807</u>

See accompanying notes to the consolidated financial statements.

APTORUM GROUP LIMITED
STATEMENT OF CASH FLOWS (PREDECESSOR BASIS)
For the Period January 1, 2017 through February 28, 2017
(Stated in U.S. Dollars)

	January 1, 2017 through February 28, 2017
Cash flows from operating activities	
Net decrease in net assets resulting from operations	\$ (626,084)
Adjustments to reconcile net decrease in net assets resulting from operations to net cash used in operating activities:	
Net change in unrealized depreciation on investments	386,741
Net realized loss on sales of investments in unaffiliated issuers	15,327
Proceeds from sales of investment securities	28,425
Increase in interest receivable	(5,099)
Increase in due from brokers	(28,438)
Decrease in other receivable and prepayments	2,520
Increase in accounts payable and accrued expenses	13,778
Decrease in management fees payable - related party	(58,830)
Net cash used in operating activities	(271,660)
Net decrease in cash	(271,660)
Cash - Beginning of period	301,643
Cash - End of period	<u>\$ 29,983</u>
Supplemental disclosures of cash flow information	
Interest paid	\$ -
Income taxes paid	\$ -

See accompanying notes to the consolidated financial statements.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

1. ORGANIZATION

The consolidated financial statements include the financial statements the Aptorum Group Limited (the “Company”) and its subsidiaries. The Company and its subsidiaries are hereinafter collectively referred to as the “Group”.

The Company, formerly known as APTUS Holdings Limited and STRIKER ASIA OPPORTUNITIES FUND CORPORATION, is a company incorporated on September 13, 2010 under the laws of the Cayman Islands with limited liability.

On March 1, 2017, the Company changed from an investment fund with management shares and non-voting participating redeemable preference shares to a holding company with operating subsidiaries. After that, the Company has become a biopharmaceutical company. The Company researches and develops life science and biopharmaceutical products within its wholly-owned subsidiary, Aptorum Therapeutics Limited, formerly known as APTUS Therapeutics Limited (“Aptorum Therapeutics”) and its indirect subsidiary companies (collectively, “Aptorum Therapeutics Group”).

Below summarizes the list of the major subsidiaries consolidated as of December 31, 2019:

Name	Incorporation date	Ownership	Place of incorporation	Principle activities
Aptorum Therapeutics Limited	June 30, 2016	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
APTUS MANAGEMENT LIMITED	May 16, 2017	100%	Hong Kong	Provision of management services to its holding company and fellow subsidiaries
Aptorum Medical Limited	August 28, 2017	94%	Cayman Islands	Provision of medical clinic services
Aptus Therapeutics (Hong Kong) Limited	June 30, 2016	100%	Hong Kong	Research and development of life science and biopharmaceutical products
Aptorum Pharmaceutical Development Limited	August 28, 2017	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
Aptorum Innovations Holding Limited	April 15, 2019	100%	Cayman Islands	Investment holding company
Aptorum Innovations Holding Pte. Ltd.	June 5, 2019	100%	Singapore	Research and development of life science and biopharmaceutical products
Aptorum Investment Holding Limited	March 29, 2019	100%	Cayman Islands	Investment holding company
Acticule Life Sciences Limited	June 30, 2017	80%	Cayman Islands	Research and development of life science and biopharmaceutical products
Claves Life Sciences Limited	August 2, 2017	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
Nativus Life Sciences Limited	July 7, 2017	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
Videns Incorporation Limited	March 2, 2017	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
mTOR (Hong Kong) Limited	November 4, 2016	90%	Hong Kong	Research and development of life science and biopharmaceutical products
Scipio Life Sciences Limited	July 19, 2017	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
Signate Life Sciences Limited	August 28, 2017	100%	Cayman Islands	Research and development of life science and biopharmaceutical products
SMTPH Limited	April 18, 2019	100%	Seychelles	Investment holding company
Smart Pharmaceutical Research Limited	April 24, 2019	100%	Samoa	Pharmaceutical research and analysis
Smart Pharmaceutical Development Pte. Limited	May 10, 2019	100%	Singapore	Research and development of life science and biopharmaceutical products
Smart Pharmaceutical Limited Partnership	June 7, 2019	100%	Seychelles	Issuance of asset backed securities

Initial public offering

On December 17, 2018, the Group completed an initial public offering (the “IPO” or “Offering”) with new issuance of 761,419 ordinary shares at \$15.80 for total offering size of approximately \$12.0 million before deducting commissions and expenses. The net proceeds from the IPO was approximately \$10.3 million, net off underwriting discount of approximately \$1.2 million and offering costs of approximately \$0.5 million. After the IPO, the ordinary shares began trading on the NASDAQ Global Market under the ticker symbol “APM”.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Deferred offering costs

Deferred offering costs consist principally of legal, printing and registration costs in connection with the Group's IPO. Such costs are deferred until the closing of the Offering, at which time the deferred costs are offset against the offering proceeds. Deferred offering costs as of December 31, 2019 and 2018 amounted to \$nil on the consolidated balance sheets. At the completion of the IPO, \$1,732,229 offering costs was charged to additional paid-in capital.

2. LIQUIDITY

The Company reported a net loss of \$20,116,938, net operating cash outflow of \$13,382,633 and working capital of \$5,358,206 for the year ended December 31, 2019. In addition, the Company had an accumulated deficit of \$37,555,980 as of December 31, 2019. The Company's operating results for future periods are subject to numerous uncertainties and it is uncertain if the Company will be able to reduce or eliminate its net losses for the foreseeable future. If management is not able to generate significant revenues from its product candidates currently in development, the Company may not be able to achieve profitability.

The Company's principal sources of liquidity have been cash, marketable securities and line of credit facility from related parties. As of the date of issuance of the consolidated financial statements, the Company has approximately \$6.3 million of restricted and unrestricted cash and undrawn line of credit facility from related parties of approximately \$12.4 million. Based upon the current market price of the Company's marketable securities, it anticipates it can liquidate such marketable securities, if necessary. In addition, the Company will need to maintain its operating costs at a level which will not exceed such aforementioned sources of funds in order to continue as a going concern for a period within one year after the issuance of its consolidated financial statements.

The Company believes that available cash, together with the efforts from aforementioned management plan and actions, should enable the Company to meet current anticipated cash needs for at least the next 12 months after the date that the financial statements are issued and the Company has prepared the consolidated financial statements on a going concern basis. However, the Company continues to have ongoing obligations and it expects that it will require additional capital in order to execute its longer-term development plan. If the Company encounters unforeseen circumstances that place constraints on its capital resources, management will be required to take various measures to conserve liquidity, which could include, but not necessarily be limited to, deferring some of its research, seeking to dispose of marketable securities and drawing down from line of credit provided by related parties. Management cannot provide any assurance that the Company will raise additional capital if needed.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of presentation and consolidation

The consolidated financial statements are prepared in accordance with U.S. GAAP. Before March 1, 2017, the Company was an investment company under U.S. GAAP for the purposes of financial reporting. U.S. GAAP for an investment company requires investments to be recorded at estimated fair value and the unrealized gains and/or losses in an investment's fair value are recognized on a current basis in the statements of operations. In addition, the Company did not consolidate its subsidiaries, since they were operating companies and not investment companies. Such entities were fair valued in accordance with ASC Topic 946 ("ASC 946") and ASC Topic 820 ("ASC 820").

As of March 1, 2017, after the change of business purpose, legal form and substantive activities, the Company's status changed to an operating company from an investment company since it no longer met the criteria to qualify as an investment company under the ASC 946. The Company discontinued applying the guidance in ASC 946 and began to account for the change in status prospectively by accounting for its investments in accordance with other U.S. GAAP topics.

This change in status and the accounting policies affect the comparability of the financial statements. As such, for the period January 1, 2017 through February 28, 2017, statements of operations, changes in net assets, and cash flows have been presented on the predecessor basis of accounting as an investment company, and on the successor basis of accounting as an operating company since March 1, 2017. The consolidated balance sheets as of December 31, 2019 and 2018 have been presented on the successor basis.

The consolidated financial statements of the Group are presented on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and include the accounts of the Company, its direct and indirect wholly and majority owned subsidiaries. All material intercompany balances and transactions have been eliminated in preparation of the consolidated financial statements.

Non-controlling interests

Non-controlling interests represent the equity interests that are not attributable to the Group.

Use of estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements as well as income and expenses during the reporting period. Significant accounting estimates reflected in the Group's consolidated financial statements include valuation of equity securities, fair value of investments in securities, convertible debts and finance lease, the useful lives of intangible assets and property, plant and equipment, impairment of long-lived assets, valuation allowance for deferred tax assets, and collectability of receivables. Actual results could differ from those estimates.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Foreign currency translation and transaction

USD is the reporting currency. The functional currency of subsidiaries in the Cayman Islands, Seychelles, Samoa and the United States are USD, the functional currency of subsidiaries in Hong Kong is Hong Kong Dollars ("HKD"), the functional currency of a subsidiary in Macao is Macanese Pataca ("MOP"), the functional currency of a subsidiary in the United Kingdom is Great British Pound ("GBP"), and the functional currency of subsidiaries in Singapore is Singapore Dollars ("SGD"). An entity's functional currency is the currency of the primary economic environment in which it operates, normally that is the currency of the environment in which it primarily generates and expends cash. The management considered various indicators, such as cash flows, market expenses, financing and inter-company transactions and arrangements in determining the Group's functional currency.

In the consolidated financial statements, the financial information of the Company and its subsidiaries, which use HKD, MOP, GBP, and SGD as their functional currency, has been translated into USD. Assets and liabilities are translated from each subsidiary's functional currency at the exchange rates on the balance sheet dates, equity amounts are translated at historical exchange rates, and revenues, expenses, gains, and losses are translated using the average exchange rates for the year. Translation adjustments are reported as cumulative translation adjustments and are shown as a separate component of other comprehensive income or loss in the statements of operations and comprehensive loss.

Cash

Cash consists of cash on hand and bank deposits and cash denominated in foreign currencies, which is unrestricted as to withdraw and use.

Restricted cash

Restricted cash represented a time deposit pledged for banking facilities or cash deposited into the escrow account from investors for the purpose of the subscription of convertible debts.

Digital currencies

Digital currencies represented BitCoin, Ethereum, or other virtual currencies that the Group purchased and used to settle certain token related expenses.

Digital currencies are included in current assets in the consolidated balance sheets. Digital currencies purchased are recorded at cost.

Digital currencies held are accounted for as intangible assets with indefinite useful lives. An intangible asset with an indefinite useful life is not amortized but assessed for impairment annually, or more frequently, when events or changes in circumstances occur indicating that it is more likely than not that the indefinite-lived asset is impaired. Impairment exists when the carrying amount exceeds its fair value, which is measured using the quoted price of the digital currency at the time its fair value is being measured. In testing for impairment, the Group has the option to first perform a qualitative assessment to determine whether it is more likely than not that an impairment exists. If it is determined that it is not more likely than not that an impairment exists, a quantitative impairment test is not necessary. If the Company concludes otherwise, it is required to perform a quantitative impairment test. To the extent an impairment loss is recognized, the loss establishes the new cost basis of the asset. Subsequent reversal of impairment losses is not permitted.

Purchases of digital currencies by the Group are included within investing activities in the consolidated statements of cash flows. The utilization of digital currencies in exchange of services are included within operating activities in the consolidated statements of cash flows and any gains or losses from such use are included in other income (expense) in the consolidated statements of operations. The Company accounts for its gains or losses in accordance with the first in first out (FIFO) method.

Inventories

Inventories are stated at lower of cost and net realizable value. Cost is determined using the weighted average method.

Where there is evidence that the utility of inventories, in their disposal in the ordinary course of business, will be less than cost, whether due to physical deterioration, obsolescence, changes in price levels, or other causes, the inventories are written down to net realizable value.

Accounts receivable

Accounts receivable are stated at the original amount less an allowance for doubtful receivables, if any, based on a review of all outstanding amounts at period end. An allowance is also made when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivables. The Group analyzes the aging of the customer accounts, historical and current economic trends and the age of the receivables when evaluating the adequacy of the allowance for doubtful accounts.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Marketable securities

Marketable securities are publicly traded stocks measured at fair value and classified within Level 1 and 2 in the fair value hierarchy because the Group uses quoted prices for identical assets in active markets or inputs that are based upon quoted prices for similar instruments in active markets.

Loss on investments in marketable securities, net, amounted to \$81,839, was recognized in the consolidated statements of operations for the year ended December 31, 2019. Gain on investments in marketable securities, net, amounted to \$501,522 and \$3,912,500, respectively, were recognized in the consolidated statements of operations for the year ended December 31, 2018 and the period March 1, 2017 through December 31, 2017.

For the years ended December 31, 2019 and 2018, the Group disposed marketable securities, with sales proceeds of \$999,110 and \$637,582 received and recorded in due from brokers, respectively, and recognized a realized gain of \$538,425 and \$501,522 in the consolidated statements of operations, respectively.

During the period March 1, 2017 to December 31, 2017, the Group disposed the trading securities and available-for-sale securities, with sales proceeds of \$15,738,517 and \$310,550 received, and recognized a gain of \$3,917,046 and a loss of \$4,546 on the consolidated statements of operations.

Investments in derivatives

Investments in derivatives consisted of warrants, which are measured at fair value, with gains or losses from changes in fair value recorded through earnings. The fair value of these warrants have been determined using the Black-Scholes pricing mode. The Black-Scholes pricing model provides for assumptions regarding volatility, call and put features and risk-free interest rates within the total period to maturity.

No disposal was recorded during the year ended December 31, 2019 and the period March 1, 2017 through December 31, 2017. For the year ended December 31, 2018, the Group disposed of warrants with proceeds of \$4,957 received. Unrealized gain on the investments in derivatives amounted to \$87,599 was recognized in the consolidated statements of operations for the year ended December 31, 2019. Unrealized loss on the investments in derivatives amounted to \$974,444 and \$827,501, respectively, were recognized in the consolidated statements of operations for the year ended December 31, 2018 and the period March 1, 2017 to December 31, 2017.

Non-marketable investments

Non-marketable investments are comprising of investments in non-redeemable preferred shares of privately-held companies that are not required to be consolidated under the variable interest or voting models. Non-marketable investments are classified as non-current assets on the consolidated balance sheets as those investments do not have stated contractual maturity dates.

The non-marketable equity securities not accounted for under the equity method are measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. Adjustments are determined primarily based on a market approach as of the transaction date.

Fair value measurement

Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Group considers the principal or most advantageous market in which it would transact its business, and it considers assumptions that market participants would use when pricing the asset or liability.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

As a basis for considering such assumptions, a three-tier fair value hierarchy prioritizes the inputs utilized in measuring fair value as follows:

- Level 1 applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.
- Level 2 applies to assets or liabilities for which there are inputs other than quoted prices included within Level 1 that are observable for the asset or liability such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.
- Level 3 applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

The hierarchy requires the Group to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument’s categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The Group has estimated the fair value amounts of its financial instruments using the available market information and valuation methodologies considered to be appropriate and has determined that the carrying value of the Group’s cash, restricted cash, accounts receivable, due from brokers, other receivables and prepayments, amounts due from/to related parties and accounts payable and accrued expenses as of December 31, 2019 and 2018 approximate fair value due to the short-term nature of these assets and liabilities.

Property, plant and equipment

Property, plant and equipment is stated at cost less accumulated depreciation and impairment losses. Cost represents the purchase price of the asset and other costs incurred to bring the asset into its existing use. Maintenance, repairs and betterments, including replacement of minor items, are charged to expense; major additions to physical properties are capitalized.

Assets under construction are stated at cost less impairment losses. Cost comprises of cost of laboratory equipment delivered but not ready to be used, together with interest expense capitalized during the period of construction or installation and testing. Capitalization of these costs ceases and the asset concerned is transferred to the appropriate fixed assets category when substantially all the activities necessary to prepare the asset for its intended use are completed.

Depreciation of property, plant and equipment is provided using the straight-line method over their estimated useful lives:

Building	29 years
Computer equipment	3 years
Furniture, fixture, and office and medical equipment	5 years
Leasehold improvements	Shorter of the remaining lease terms or 5 years
Laboratory equipment	5 years
Motor vehicle	5 years

Upon sale or disposal, the applicable amounts of asset cost and accumulated depreciation are removed from the accounts and the net amount less proceeds from disposal is charged or credited to income.

Other non-current asset

Other non-current asset represents laboratory supplies that can be used for more than one year. It is stated at cost less accumulated depreciation and impairment losses. Cost represents the purchase price of the supplies.

Amortization of other non-current asset is provided using the straight-line method over their estimated useful lives. The amortization expenses for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017 are \$59,834, \$59,833 and \$nil, respectively.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Intangible assets

Indefinite-lived intangible assets are tested for impairment at least annually and are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Indefinite-lived intangible assets are impaired if their estimated fair values are less than their carrying values.

Finite-lived intangible assets are carried at cost less accumulated amortization and impairment if any. The finite intangible assets are amortized over their estimated useful life, which is the period over which the assets are expected to contribute directly or indirectly to the future cash flows of the Group. These intangible assets are tested for impairment at the time of a triggering event, if one were to occur. Finite-lived intangible assets may be impaired when the estimated undiscounted future cash flows generated from the assets are less than their carrying amounts.

The Group may rely on a qualitative assessment when performing its intangible asset impairment test. Otherwise, the impairment evaluation is performed at the lowest level of identifiable cash flows independent of other assets.

The Group's intangible assets mainly consist of computer software, exclusive rights in prepaid patented and unpatented licenses. The prepaid patented licenses are for clinical purpose or further development into other products. Prepaid unpatented license is for further development, once the associated research and development efforts are completed, the prepaid unpatented license will be reclassified as a finite-lived asset and is amortized over its useful life. The estimated useful life of the exclusive rights in using patents is generally the remaining patent life from the acquisition date to expiration date under the law, which is 17 to 20 years, the Group will reassess the remaining patent life on annual basis, and the Group will assess the intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable.

Impairment of long-lived assets

The Group reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable. When these events occur, the Group measures impairment by comparing the carrying value of the long-lived assets to the estimated undiscounted future cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, the Group would recognize an impairment loss, which is the excess of carrying amount over the fair value of the assets, using the expected future discounted cash flows.

Convertible debts

The Group determines the appropriate accounting treatment of its convertible debts in accordance with the terms in relation to the conversion feature, call and put option, beneficial conversion feature ("BCF") and settlement feature. After considering the impact of such features, the Group concluded that, the convertible debts contained a contingent beneficial conversion feature, which shall not be recognized in earnings until the contingency is resolved, and therefore accounted for such instrument as a liability in its entirety.

Convertible debts were subsequently measured at amortized cost, using the effective interest rate method. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortization is included in interest expense in the consolidated statements of operations.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Management concluded that the contingency was effectively resolved upon the completion of the IPO on December 17, 2018 so that part of the convertible debts were converted automatically accordingly. The BCF derecognized upon automatic conversion was recorded as interest expense with a corresponding increase to additional paid-in capital. The remaining BCF was recorded as debt discount, which was amortized through the maturity of the convertible debts, with a corresponding increase to additional paid-in capital.

On April 24, 2019, the Group repurchased its convertible debts at approximately \$13.6 million with carrying amount of approximately \$13.5 million and a gain on extinguishment on convertible debts of approximately \$1.2 million was recognized. The repurchasing of convertible debts is considered an extinguishment and the difference between the repurchasing price of debt, the net carrying amount of the extinguished debt and the intrinsic value of BCF is recognized in the consolidated statements of operations. The intrinsic value of BCF of approximately \$1.3 million at the extinguishment date was recorded as a reduction of additional paid-in capital.

Finance lease

Leases that transfer substantially all the rewards and risks of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalized at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under capitalized finance leases are included in property, plant and equipment, and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The interest expenses of such leases are charged to the consolidated statements of operations to provide a constant periodic rate of charge over the lease terms.

Warrant liabilities

For warrants that are not indexed to the Group's shares, the Group records the fair value of the issued warrants as liabilities at each balance sheet date and records changes in the estimated fair value as a non-cash gain or loss in the consolidated statements of operations and comprehensive loss. The warrant liabilities are recognized in the consolidated balance sheets at the fair value (level 3). The fair value of these warrants have been determined using the Black-Scholes pricing mode. The Black-Scholes pricing model provides for assumptions regarding volatility, call and put features and risk-free interest rates within the total period to maturity.

Revenue recognition

Revenue is recognized when (or as) the Company satisfies performance obligations by transferring a promised goods or services to a customer. Revenue is measured at the transaction price which is based on the amount of consideration that the Company expects to receive in exchange for transferring the promised goods or services to the customer. Contracts with customers are comprised of invoices and written contracts. Revenue from healthcare services is measured upon the provision of the relevant services.

Cost of healthcare service

Cost of healthcare service rendered represents cost in relation to the medical services provided including the compensation of the physicians and cost of pharmaceutical supplies and medicine.

Research and development expenses

Research and development costs are expensed as incurred. Research and development expenses are comprised of costs incurred in performing research and development activities, including amortization of the patent license, depreciation of laboratory equipment, external costs of outside vendors engaged to conduct preclinical development activities and trials.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Income taxes

The Group accounts for income taxes under the asset and liability method. Under this method, deferred income taxes are determined based on differences between the financial carrying amounts of existing assets and liabilities and their tax bases. Income taxes are provided for in accordance with the laws of the relevant taxing authorities.

A valuation allowance is provided for deferred tax assets if it is more likely than not that these items will either expire before the Group is able to realize their benefits, or that future deductibility is uncertain. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

Uncertain tax positions

The Group accounts for uncertainty in income taxes using a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. Interest and penalties related to uncertain tax positions are recognized and recorded as necessary in the provision for income taxes. The Group recognizes interest on non-payment of income taxes and penalties associated with tax positions when a tax position does not meet more likely than not thresholds be sustained under examination. The tax returns of the Group's Hong Kong subsidiaries are subject to examination by the relevant tax authorities. According to the Hong Kong Inland Revenue Department, the statute of limitation is six years if any company chargeable with tax has not been assessed or has been assessed at less than the proper amount, the statute of limitation is extended to ten years if the underpayment of taxes is due to fraud or willful evasion. According to United Kingdom, Singapore, the United States and Samoa tax rule, trading losses are available to be carried forward indefinitely. According to the Seychelles tax rule, net operating losses are available to be carried forward for 5 years. The Group did not have any material interest or penalties associated with tax positions for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, and did not have any significant unrecognized uncertain tax positions as of December 31, 2019 and 2018. The Group does not believe that its assessment regarding unrecognized tax benefits will materially change over the next twelve months.

Comprehensive income or loss

U.S. GAAP generally requires that recognized revenue, expenses, gains and losses be included in net income or loss. Although certain changes in assets and liabilities are reported as separate components of the equity section of the consolidated balance sheets, such items, along with net income or loss, are components of comprehensive income or loss. The components of other comprehensive income or loss consist of exchange differences on translation of foreign operations.

Loss per share

Basic loss per share is computed by dividing net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. Diluted loss per share reflects the potential dilution that could occur if securities or other contracts to issue ordinary shares were exercised or converted into ordinary shares. Potential dilutive securities are excluded from the calculation of diluted loss per share in loss periods as their effect would be anti-dilutive.

Risks and Uncertainties

The Company is subject to a number of risks associated with companies at a similar stage, including dependence on key individuals, competition from similar services and larger companies, volatility of the industry, ability to obtain regulatory clearance, ability to obtain adequate financing to support growth, the ability to attract and retain additional qualified personnel to manage the anticipated growth of the Company and general economic conditions.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Recently adopted accounting pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606) (“ASU 2014-09”), which was subsequently modified in August 2015 by ASU 2015-14, Revenue from Contracts with Customers: Deferral of the Effective Date. The Group adopted this standard effective January 1, 2019 using the modified retrospective approach, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. The adoption does not have a material impact to the consolidated financial statements.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01 (“ASU 2016-01”) “Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities,” which amends various aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The Group adopted ASU 2016-01 as of January 1, 2019 using the modified retrospective method for marketable equity securities and the prospective method for non-marketable equity securities. The following table summarizes the changes to the consolidated balance sheet for the adoption of ASU 2016-01:

	December 31, 2018	Adjustment due to ASU 2016-01	January 1, 2019
Accumulated deficit	\$ (17,379,185)	\$ (1,490,033)	\$ (18,869,218)
Accumulated other comprehensive loss	\$ (1,484,688)	\$ 1,490,033	\$ 5,345

The Group has elected to use the measurement alternative for the non-marketable equity securities, defined as cost adjusted for changes from observable transactions for identical or similar investments of the same issuer, less impairment. The adoption of ASU 2016-01 increases the volatility of other income (expense), net, as a result of the unrealized gain or loss from the remeasurement of the Group’s equity securities.

Recently issued accounting standards which have not yet been adopted

The Group is an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2010 (the “JOBS Act”). Under the JOBS Act, the emerging growth companies (“EGCs”) can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses (“ASU 2016-13”). Subsequently, the FASB issued ASU 2019-05, Financial Instruments- Credit Losses (Topic 326): Targeted Transition Relief. The amendments in ASU 2016-13 update guidance on reporting credit losses for financial assets. These amendments affect loans, debt securities, accounts receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. The amendments are effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. As an EGC the Group can adopt the amendment for fiscal years beginning after December 15, 2021, and interim period within those fiscal years. The Group is currently evaluating the impact on its consolidated financial statements of adopting this standard.

In February 2016, the FASB issued ASU 2016-02, Leases (“ASU 2016-02”), which requires a lessee to recognize a right-of-use asset and a lease liability for operating leases, initially measured at the present value of the future lease payments, in the balance sheet. ASU 2016-02 also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This new guidance is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted. The Group has evaluated the potential effects of adopting the provisions of ASU 2016-02 on its consolidated financial statements. The Group has estimated that the operating lease right-of-use assets of \$959,641, and operating lease liabilities of \$982,288 will be recognized at January 1, 2020 in the consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement, which amends ASC 820, Fair Value Measurement. This ASU modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. The amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The removed and modified disclosures will be adopted on a retrospective basis and the new disclosures will be adopted on a prospective basis. The adoption will not have a material effect on the Group’s financial statements.

In December 2019, the FASB issued Accounting Standards Update No. 2019-12, Income Taxes (Topic 740): “Simplifying the Accounting for Income Taxes” (“ASU 2019-12”), which simplifies the accounting for income taxes. This standard will be effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022, on a prospective basis, and early adoption is permitted. The Group is currently evaluating the impact of the new standard on its consolidated financial statements.

The Group does not believe other recently issued but not yet effective accounting standards, if currently adopted, would have a material effect on the consolidated financial position, statements of operations and cash flows.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

4. REVENUE

The Company adopted ASC 606 using the modified retrospective method as applied to customer contracts that were not completed as of January 1, 2019. As a result, financial information for reporting periods beginning after January 1, 2019 are presented under ASC 606, while comparative financial information has not been adjusted and continues to be reported in accordance with the Company's historical accounting policy for revenue recognition prior to the adoption of ASC 606.

For the year ended December 31, 2019, all revenue came from provision of healthcare services in Hong Kong.

5. FAIR VALUE MEASUREMENT

The following table provides the assets and liabilities carried at fair value measured on a recurring basis as of December 31, 2019 and 2018:

December 31, 2019	Level 1	Level 2	Level 3	Total
Current Assets				
Marketable securities				
Common stocks	\$ 806,778	\$ 256,333	\$ -	\$ 1,063,111
Investments in derivatives				
Warrants	-	-	203,320	203,320
Total assets at fair value	\$ 806,778	\$ 256,333	\$ 203,320	\$ 1,266,431
December 31, 2018	Level 1	Level 2	Level 3	Total
Current Assets				
Marketable securities – Available-for-sale securities				
Common stocks	\$ 813,728	\$ 200,610	\$ -	\$ 1,014,338
Investments in derivatives				
Warrants	-	-	115,721	115,721
Total assets at fair value	\$ 813,728	\$ 200,610	\$ 115,721	\$ 1,130,059

The following is a reconciliation of Level 3 assets during the year ended December 31, 2019:

	Warrants
Balance at January 1, 2019	\$ 115,721
Change in unrealized appreciation	87,599
Balance at December 31, 2019	\$ 203,320
Net change in unrealized appreciation relating to investments still held at December 31, 2019	87,599

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

The following is a reconciliation of Level 3 assets for the year ended December 31, 2018:

Balance at January 1, 2018
Change in unrealized depreciation
Balance at December 31, 2018

Net change in unrealized depreciation relating to investments still held at December 31, 2018

Warrants	
\$	1,070,940
	(955,219)
\$	115,721
	(955,219)

The following is a reconciliation of Level 3 assets for the period February 28, 2017 through December 31, 2017:

	Aptorum Therapeutics- related party	Common Stocks	Preferred Stocks	Warrants	Convertible Notes	Total
Balance at February 28, 2017	\$ 757,647	\$ 7,920,000	\$ 4,314,998	\$ 1,907,470	\$ 3,082,020	\$ 17,982,135
Transfer out of Level 3 due to change in status – consolidated subsidiary (a)	(757,647)	-	-	-	-	(757,647)
Transfer out of fair value leveling since recorded as cost method (b)	-	(7,920,000)	(4,314,998)	-	-	(12,234,998)
Balance at March 1, 2017	\$ -	\$ -	\$ -	\$ 1,907,470	\$ 3,082,020	\$ 4,989,490
Reclassification between different investment type (c)	-	-	3,079,715	-	(3,079,715)	-
Transfer out of fair value leveling since recorded as cost method (c)	-	-	(3,079,715)	-	-	(3,079,715)
Change in unrealized depreciation	-	-	-	(836,530)	(2,305)	(838,835)
Balance at December 31, 2017	\$ -	\$ -	\$ -	\$ 1,070,940	\$ -	\$ 1,070,940
Net change in unrealized depreciation relating to investments still held at December 31, 2017	-	-	-	(836,530)	-	(836,530)

- a. Upon the effective date of the change in status, March 1, 2017, the subsidiaries were no longer recognized at fair value and were instead consolidated when preparing the financial statements.
- b. The equity investments of common stock and preferred stock were non-marketable investments under cost method upon change in status. Subsequently, Athenex Inc. was listed on the NASDAQ stock exchange on June 14, 2017 and common stock with an amount of \$7,920,000 has been transferred to common stock in Level 1 with amount of \$7,920,000, which was subsequently sold in December 2017 with a gain from the marketable securities of \$3,722,234 recognized.
- c. On March 9, 2017, the convertible promissory notes (including its accrued interest, totally \$520,822) of Centrexion Therapeutics Corporation was converted into preferred stock (Series C) of the same company. On May 25, 2017, the convertible promissory notes (including its accrued interest, totaling \$2,558,893) of Alzheon Inc., was converted into preferred stock (Series B) of the same company. The preferred stocks are considered non-marketable investments and were therefore reclassified out of the fair value hierarchy to be reported under cost method.

The following table presents the quantitative information about the Group's Level 3 fair value measurements of investment as of December 31, 2019 and 2018, which utilized significant unobservable internally-developed inputs:

December 31, 2019	Valuation technique	Unobservable input	Range (weighted average)	Sensitivity of fair value to input
Warrants	Black-Scholes Model	Estimated time to exit Historical Volatility	12-18 months 73% - 301%	10% increase (decrease) in volatility would result in increase (decrease) in fair value by \$17,871
December 31, 2018	Valuation technique	Unobservable input	Range (weighted average)	Sensitivity of fair value to input
Warrants	Black-Scholes Model	Estimated time to exit Historical Volatility	12-30 months 73% - 188%	10% increase (decrease) in volatility would result in increase (decrease) in fair value by \$19,691

Warrants

As of December 31, 2019 and 2018, the volume of the Group's derivative activities based on their notional amount and number of contracts, categorized by primary underlying risk, are as follows:

Primary underlying risk	Long Exposure			
	December 31, 2019		December 31, 2018	
	Notional Amounts	Number of Contracts	Notional Amounts	Number of Contracts
Equity Price				
Warrants	\$ 265,576	2,234,373	\$ 218,270	2,257,682

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

The following table identifies the fair value amounts of derivative instruments included in the consolidated balance sheets as derivative contracts, categorized by primary underlying risk, as of December 31, 2019 and 2018.

Primary underlying risk	December 31, 2019		December 31, 2018	
	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Equity Price				
Warrants	\$ 203,320	\$ -	\$ 115,721	\$ -

The following table identifies the net gain and loss amounts included in the consolidated statement of operations as net unrealized gain (loss) from derivative contracts, categorized by primary underlying risk, for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017:

Primary underlying risk	Year ended December 31, 2019		Year ended December 31, 2018		March 1, 2017 through December 31, 2017	
	Realized loss	Unrealized gain	Realized loss	Unrealized loss	Realized loss	Unrealized loss
Equity Price						
Warrants	\$ -	\$ 87,599	\$ (19,225)	\$ (955,219)	\$ (7,094)	\$ (820,407)

Non-marketable equity securities remeasured for the year ended December 31, 2019 are classified within Level 3 in the fair value hierarchy because the Group estimated the value based on valuation methods using the observable transaction price at the transaction date and other unobservable inputs including volatility, rights, and obligations of the securities hold.

The following is a summary of unrealized gains and losses recorded in other income (expense), net, and included as adjustments to the carrying value of non-marketable investments held as of December 31, 2019:

	Year ended December 31, 2019
Upward adjustments	\$ 1,017,468
Total unrealized gain for non-marketable investments	\$ 1,017,468

The following table summarizes the total carrying value of our non-marketable investments held as of December 31, 2019 including cumulative unrealized upward and downward adjustments made to the initial cost basis of the investments:

	December 31, 2019
Initial cost basis	\$ 6,094,712
Upward adjustments	1,017,468
Total carrying value at the end of the period	\$ 7,112,180

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

6. OTHER RECEIVABLES AND PREPAYMENTS

Other receivables and prepayments as of December 31, 2019 and 2018 consisted of:

	December 31, 2019	December 31, 2018
Prepaid insurance	\$ 154,011	\$ 147,864
Prepaid service fee	296,565	75,224
Rental deposits	8,584	8,576
Prepaid rental expenses	37,169	46,948
Prepaid research and development expenses	453,634	41,614
Other receivables	109,714	109,435
Others	19,366	34,495
	<u>\$ 1,079,043</u>	<u>\$ 464,156</u>

As of December 31, 2019, the balance included \$108,000 prepayment to Aenco Solutions Limited, a related party which is controlled by Ian Huen, the Chief Executive Officer and Executive Director of the Group, for tokens consultancy services (see note 13).

7. DIGITAL CURRENCIES

The following table presents additional information about digital currencies:

	December 31, 2019	December 31, 2018
Beginning balance	\$ -	\$ -
Purchase of digital currencies	200,000	-
Utilization of digital currencies to settle service fee	(245,178)	-
Gain on use of digital currencies	46,717	-
Ending balance	<u>\$ 1,539</u>	<u>\$ -</u>

8. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment as of December 31, 2019 and 2018 consisted of:

	December 31, 2019	December 31, 2018
Building	\$ 1,488,396	\$ 1,488,396
Computer equipment	76,365	64,911
Furniture, fixture, and office and medical equipment	271,009	262,819
Leaschold improvements	665,546	664,713
Laboratory equipment	4,029,640	2,045,034
Motor vehicle	239,093	239,093
Assets in construction	1,899,169	-
	<u>8,669,218</u>	<u>4,764,966</u>
Less: accumulated depreciation	1,576,183	504,364
Property, plant and equipment, net	<u>\$ 7,093,035</u>	<u>\$ 4,260,602</u>

Depreciation expenses for property, plant and equipment amounted to \$1,071,799, \$497,908 and \$6,470 for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, respectively.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

9. INTANGIBLE ASSETS, NET

	December 31, 2019	December 31, 2018
Gross carrying amount		
Prepaid unpatented license	\$ 200,000	\$ 200,000
Prepaid patented licenses	1,322,820	1,322,820
Computer software	97,462	61,384
	<u>1,620,282</u>	<u>1,584,204</u>
Less: accumulated amortization		
Prepaid patented licenses	257,619	155,026
Computer software	50,980	19,638
	<u>308,599</u>	<u>174,664</u>
Intangible assets, net		
Prepaid unpatented license	200,000	200,000
Prepaid patented licenses	1,065,201	1,167,794
Computer software	46,482	41,746
Intangible assets, net	<u>\$ 1,311,683</u>	<u>\$ 1,409,540</u>

As of December 31, 2019 and 2018, the Group has capitalized seven of the exclusive licenses which includes seven patented and one unpatented technologies in the areas of neurology, infectious diseases, gastroenterology, oncology, surgical robotics and natural health. Pursuant to the license agreements, the Group paid upfront payments and became the exclusive licensee to prosecute certain patents developed or licensed under the applicable agreements.

The Group recognized the prepaid unpatented license to reflect the fair value of the subsidiaries as of the date of the change in status from an investment company to an operating entity. The Group capitalizes the prepaid patented license for the exclusive rights with completed filing of patents in certain jurisdictions (e.g., the United States of America and Europe) and alternative future uses.

Prepaid unpatented license is indefinite-lived intangible assets which are tested for impairment annually. Prepaid patented licenses and computer software are finite-lived intangible assets which are amortized over their estimated useful life. Amortization expenses for finite-lived intangible assets amounted to \$167,985, \$124,551 and \$52,433 for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, respectively. The Group wrote off the cost and the related amortization of \$34,400, \$2,320 and \$nil after the expiration of the computer software for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, respectively.

The Group expects amortization expense related to its finite-lived intangible assets for the next five years and thereafter to be as follows as of December 31, 2019:

For the years ending December 31,	Amount
2020	\$ 146,826
2021	104,842
2022	102,593
2023	102,593
2024	97,099
Thereafter	557,730
Total	<u>\$ 1,111,683</u>

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

10. LONG-TERM DEPOSITS

Long-term deposits as of December 31, 2019 and 2018 consisted of:

Rental deposits
Prepayments for equipment

	December 31, 2019		December 31, 2018
\$	132,043	\$	132,043
	162,563		3,285,135
\$	294,606	\$	3,417,178

11. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses as of December 31, 2019 and 2018 consisted of:

Research and development expenses payable
Cost of healthcare services payable
Professional fees payable
Insurance expense payable
Interest payable
Payables for leasehold improvement and equipment
Deferred bonus and salaries payable
Deferred rent
Others

	December 31, 2019		December 31, 2018
\$	554,791	\$	398,899
	45,234		40,139
	171,037		178,117
	70,811		-
	8,802		223,802
	26,779		73,864
	1,570,324		183,065
	55,484		58,810
	83,265		90,451
\$	2,586,527	\$	1,247,147

12. INCOME TAXES

The Company and its subsidiaries file tax returns separately.

Income taxes

Cayman Islands: under the current laws of the Cayman Islands, the Company and its subsidiaries in the Cayman Islands are not subject to taxes on their income and capital gains.

Hong Kong: in accordance with the relevant tax laws and regulations of Hong Kong, a company registered in Hong Kong is subject to income taxes within Hong Kong at the applicable tax rate on taxable income. In March 2018, the Hong Kong Government introduced a two-tiered profit tax rate regime by enacting the Inland Revenue (Amendment) (No.3) Ordinance 2018 (the "Ordinance"). Under the two-tiered profits tax rate regime, the first \$2 million of assessable profits of qualifying corporations is taxed at 8.25% and the remaining assessable profits at 16.5%. The Ordinance is effective from the year of assessment 2018-2019. According to the policy, if no election has been made, the whole of the taxpaying entity's assessable profits will be chargeable to Profits Tax at the rate of 16.5% or 15%, as applicable. Because the preferential tax treatment is not elected by the Group, all the subsidiaries registered in Hong Kong are subject to income tax at a rate of 16.5%. The subsidiaries registered in Hong Kong did not have assessable profits that were derived Hong Kong during the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017. Therefore, no Hong Kong profit tax has been provided for in the periods presented.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

United Kingdom: in accordance with the relevant tax laws and regulations of United Kingdom, a company registered in the United Kingdom is subject to income taxes within United Kingdom at the applicable tax rate on taxable income. All the United Kingdom subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 19%. The subsidiary in United Kingdom did not have assessable profits that were derived from United Kingdom during the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017. Therefore, no United Kingdom profit tax has been provided for in the periods presented.

Singapore: in accordance with the relevant tax laws and regulations of Singapore, a company registered in the Singapore is subject to income taxes within Singapore at the applicable tax rate on taxable income. All the Singapore subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 17%. The subsidiary in Singapore did not have assessable profits that were derived from Singapore during the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017. Therefore, no Singapore profit tax has been provided for in the periods presented.

Seychelles: in accordance with the relevant tax laws and regulations of Seychelles, a company registered in the Seychelles is subject to income taxes within Seychelles at the applicable tax rate on taxable income. All the Seychelles subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 25%. The subsidiary in Seychelles did not have assessable profits that were derived from Seychelles during the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017. Therefore, no Seychelles profit tax has been provided for in the periods presented.

Samoa: in accordance with the relevant tax laws and regulations of Samoa, a company registered in the Samoa is subject to income taxes within Samoa at the applicable tax rate on taxable income. All the Samoa subsidiaries that are not entitled to any tax holiday were subject to income tax at a rate of 27%. The subsidiary in Samoa did not have assessable profits that were derived from Samoa during the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017. Therefore, no Samoa profit tax has been provided for in the periods presented.

United States (Nevada): in accordance with the relevant tax laws and regulations of the United States, a company registered in the United States is subject to income taxes within the United States at the applicable tax rate on taxable income. All the United States subsidiaries in Nevada that are not entitled to any tax holiday were subject to income tax at a rate of 21%. The subsidiary in the United States did not have assessable profits that were derived from the United States during the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017. Therefore, no United States profit tax has been provided for in the periods presented.

The components of the provision for income taxes expenses are:

	Year ended December 31, 2019	Year ended December 31, 2018	March 1, 2017 through December 31, 2017
Current	\$ -	\$ -	\$ -
Deferred	-	-	-
Total income taxes expense	<u>\$ -</u>	<u>\$ -</u>	<u>-</u>

The reconciliation of income taxes expenses computed at the Hong Kong statutory tax rate applicable to income tax expense is as follows:

	Year ended December 31, 2019	Year ended December 31, 2018	March 1, 2017 through December 31, 2017
Net loss before tax	\$ (20,116,938)	\$ (15,134,485)	\$ (2,561,507)
Provision for income taxes at Hong Kong statutory income tax rate (16.5%)	(3,319,294)	(2,497,190)	(422,649)
Impact of different tax rates in other jurisdictions	(91,623)	(3,066)	-
Non-taxable income	(389,714)	(95,018)	-
Non-deductible expenses	702,433	540,893	-
Prior year tax effect	-	-	(576,970)
Change in valuation allowance	3,098,198	2,054,381	999,619
Effective income tax expense	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Deferred tax asset, net

Deferred tax assets and deferred tax liabilities reflect the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purpose and the tax bases used for income tax purpose. The following represents the tax effect of each major type of temporary difference.

	December 31, 2019	December 31, 2018
Deferred tax asset:		
Tax loss carry forward	\$ 6,699,345	\$ 3,499,428
Deferred tax liability:		
Depreciation and amortization	(547,147)	(445,428)
Net deferred tax assets before valuation allowance	6,152,198	3,054,000
Valuation allowance	(6,152,198)	(3,054,000)
Deferred tax asset, net	\$ -	\$ -

As of December 31, 2019 and 2018, the Group had net operating loss carry-forwards of \$40,329,428 and \$21,191,279, respectively, including its Hong Kong, Singapore, Seychelles, Samoa, the United States and the United Kingdom operations, which are available to reduce future taxable income. Net operating loss carry forward from Seychelles amounting to \$439,345 as of December 31, 2019 are available to be carried forward for 5 years, while all of the other losses can be carried forward indefinitely.

Valuation allowance was provided against deferred tax assets in entities where it was determined, it was more likely than not that the benefits of the deferred tax assets will not be realized. The Group had deferred tax assets which consisted of tax loss carry forward, which can be carried forward to offset future taxable income. The Group maintains a full valuation allowance on its net deferred tax assets. The management determines it is more likely than not that all of its deferred tax assets will not be utilized. The valuation allowance increased by \$3,098,198, \$2,054,381 and \$999,619, respectively, for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

13. RELATED PARTY BALANCES AND TRANSACTIONS

The following is a list of a director and related parties to which the Group has transactions with:

- (a) Ian Huen, the Chief Executive Officer and Executive Director of the Group;
- (b) AENEAS CAPITAL LIMITED, an entity controlled by Ian Huen;
- (c) Aeneas Limited, an entity controlled by Ian Huen;
- (d) Aeneas Group Limited, an entity controlled by Ian Huen;
- (e) Aeneas Management Limited, an entity controlled by Ian Huen;
- (f) Aenco Solutions Limited, an entity controlled by Ian Huen;
- (g) Aenco Limited, an entity controlled by Ian Huen;
- (h) Jurchen Investment Corporation, the holding company and an entity controlled by Ian Huen;
- (i) Clark Cheng, the Executive Director of the Group;
- (j) Sabrina Khan, the Chief Financial Officer of the Group.

Amounts due from related parties

Amounts due from related parties consisted of the following as of December 31, 2019 and 2018:

Current

Aeneas Management Limited
AENEAS CAPITAL LIMITED
Total

December 31, 2019	December 31, 2018
\$ 962	\$ -
-	169,051
<u>\$ 962</u>	<u>\$ 169,051</u>
50,000	50,000

Non-current

Jurchen Investment Corporation (Note e)

Amounts due to related parties

Amounts due to related parties consisted of the following as of December 31, 2019 and 2018:

Current

Aenco Solutions Limited
Aeneas Group Limited
Jurchen Investment Corporation
Ian Huen
Clark Cheng
Sabrina Khan
Total

December 31, 2019	December 31, 2018
\$ 5,782	\$ -
14,247	-
20,055	-
127	2,545
1,114	8,893
268	21,979
<u>\$ 41,593</u>	<u>\$ 33,417</u>

Non-current

Aeneas Group Limited (Note a)
Jurchen Investment Corporation (Note a)

\$ 3,330,472	\$ -
3,000,000	-
<u>6,330,472</u>	<u>-</u>

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)Related party transactions

Related party transactions consisted of the following for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017:

	Year ended December 31, 2019	Year ended December 31, 2018	March 1, 2017 through December 31, 2017
Borrowings from related parties (Note a)			
- Aeneas Group Limited	\$ 3,330,472	\$ -	\$ -
- Jurchen Investment Corporation	\$ 3,000,000	\$ -	\$ -
Interest expenses (Note a)			
- Aeneas Group Limited	\$ 14,247	\$ -	\$ -
- Jurchen Investment Corporation	\$ 20,055	\$ -	\$ -
Payments on behalf of the Group (Note b)			
- AENEAS CAPITAL LIMITED	\$ 5,057	\$ -	\$ 64,038
- Aeneas Management Limited	\$ 5,372	\$ 156,961	\$ -
- Aenco Solutions Limited	\$ 186,671	\$ -	\$ -
Prepayments to related parties (Note b)			
- Aenco Solutions Limited	\$ 200,000	\$ -	\$ -
Expense reimbursement (Note b)			
- AENEAS CAPITAL LIMITED	\$ 5,057	\$ 7,331	\$ 66,881
- Aeneas Management Limited	\$ 5,372	\$ 156,961	\$ -
Payments on behalf of related parties (Note c)			
- AENEAS CAPITAL LIMITED	\$ -	\$ 22,934	\$ 109,025
- Aeneas Limited	\$ -	\$ -	\$ 132,074
- Aeneas Group Limited	\$ -	\$ -	\$ 1,853
Repayments from related parties (Note c)			
- AENEAS CAPITAL LIMITED	\$ 169,051	\$ 132,128	\$ -
- Aeneas Limited	\$ -	\$ 190,427	\$ -
- Aeneas Group Limited	\$ -	\$ 7,451	\$ -
Healthcare services income			
- Aeneas Management Limited	\$ 1,923	\$ -	\$ -
Consultant, management and administrative fees (Note d)			
- AENEAS CAPITAL LIMITED	\$ -	\$ 448,718	\$ 640,932
- Aeneas Management Limited	\$ 698,152	\$ -	\$ -
- Aenco Limited	\$ 830,769	\$ -	\$ -
Rental expense(Note e)			
- Jurchen Investment Corporation	\$ 227,729	\$ 207,841	\$ -
Payment for rental deposit (Note e)			
- Jurchen Investment Corporation	\$ -	\$ 50,000	\$ -
Tokens maintenance fee (Note b)			
- Aenco Solutions Limited	\$ 67,876	\$ -	\$ -
Issuance of tokens for tokens creation, offering and consultancy services (Note f)			
- Aenco Solutions Limited	\$ 300,000	\$ -	\$ -
Tokens creation, offering and consultancy services expense (Note f)			
- Aenco Solutions Limited	\$ 192,000	\$ -	\$ -
Prepayment of tokens consultancy services (Note f)			
- Aenco Solutions Limited	\$ 108,000	\$ -	\$ -
A borrowing from a related party (Note g)			
- Ian Huen	\$ -	\$ -	\$ 6,410

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Note a: On August 13, 2019, the Group entered into financing arrangements with Aeneas Group Limited, a related party, and Jurchen Investment Corporation, the ultimate parent of the Group, allowing the Group to access up to a total \$15.0 million in line of credit debt financing. The line of credit will mature on August 12, 2022 and the interest on the outstanding principal indebtedness will be at the rate of 8% per annum.

Note b: AENEAS CAPITAL LIMITED and Aeneas Management Limited has paid the operation fee on behalf of the Group and received the expense reimbursement. The balances were non-interest bearing.

The Group has prepaid Aenco Solutions Limited, of which the whole amounts were non-interest bearing. The prepayment was used for paying on behalf of the Group of token listing fees, purchasing digital currencies and settlement of maintenance service provided by Aenco Solutions Limited.

Note c: The Group has paid the expenses on behalf of AENEAS CAPITAL LIMITED, Aeneas Limited and Aeneas Group Limited, of which all amounts were non-interest bearing. There was no further payment on behalf transactions since April 2018.

Note d: AENEAS CAPITAL LIMITED provides certain management and administrative services to the Group. For the year ended December 31, 2018, AENEAS CAPITAL LIMITED was entitled to receive a fixed amount of administrative fees of HKD500,000 (approximately \$64,103) per calendar month. On July 31, 2018, the agreement was mutually agreed to be terminated.

Aenco Limited provided certain information technology services to the Group. For the year ended December 31, 2019, Aenco Limited was entitled to receive a fixed amount of services fees of HKD540,000 (approximately \$69,231) per calendar month with the expiry date on December 31, 2019. The agreement was originally renewed under the same terms with the expiry date on December 31, 2020. On January 29, 2020, both parties agreed to replace the agreement no later than April 30, 2020. Pursuant to the replaced agreement, Aenco Limited is entitled to receive a fixed amount of services fee of HKD700,000 (approximately \$89,744) per calendar month. The agreement will be expired on December 31, 2020.

Aeneas Management Limited provided certain documentation and administrative services to the Group. For the year ended December 31, 2019, Aeneas Management Limited was entitled to receive a fixed amount of services fees of HKD452,000 (approximately \$57,949) per calendar month with the expiry date on December 31, 2019. The agreement was originally renewed under the same terms with the expiry date on December 31, 2020. On January 29, 2020, both parties agreed to terminate the agreement no later than April 30, 2020.

Note e: Jurchen Investment Corporation entered into a sub-tenancy agreement with a subsidiary of the Group for the rental arrangement of an office in Hong Kong. For the period February 1, 2018 through January 31, 2021, Jurchen Investment Corporation was entitled to receive a fixed amount of rental fee of HK\$130,000 (approximately USD16,667) per calendar month. As of December 31, 2019, the amounts due from Jurchen Investment Corporation represented a \$50,000 rental deposit.

Note f: In July 2019, Smart Pharmaceutical Limited Partnership, a wholly owned subsidiary of the Group, transferred 100,000,000 SMPT token to Aenco Solutions Limited, a related party, in exchange of the services related to token creation and offering and consulting services for five years for an amount of \$300,000.

Note g: The non-interest-bearing loan was borrowed from management for operation purpose and the loan was due on demand.

On November 11, 2017, the Group sold 100% of the ownership of Aeneas Limited and its subsidiary, Aeneas Group Limited, to Jurchen Investment Corporation for cash proceeds of \$1. The Group recognized a gain on disposal of entity under common control of \$67,874, net of net liabilities of Aeneas Limited and its subsidiary of \$67,874 in consolidated statement of equity.

On April 3, 2018, Aptorum Medical Limited issued 526 shares to Clark Cheng, decreasing the equity interest of the Company from 100% to 95%. On March 29, 2019, Aptorum Medical Limited issued 112 shares to Clark Cheng in according to the appointment agreement, decreasing the equity interest of the Company from 95% to 94%. On January 2, 2020, Aptorum Medical Limited further issued 115 shares to Clark Cheng in according to the appointment agreement, decreasing the equity interest of the Company from 94% to 93%.

In April 2018, the Group, AENEAS CAPITAL LIMITED, Aeneas Management Limited and Aeneas Group Limited entered into a net settlement agreement to offset the amounts due from related parties against the amounts due to related parties. Thereby, the Group is released from obligation for a total amount of \$164,973, netting off receivables of total amount of \$197,878 and collected remaining balance of \$32,905.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

14. CONVERTIBLE DEBTS

Convertible bonds

On April 6, 2018, the Group entered into a subscription agreement (the “Bond Subscription Agreement”) with Peace Range Limited (“Peace Range”). Pursuant to the Bond Subscription Agreement, the Group issued Peace Range a \$15,000,000 convertible bond (the “Bond” and the “Bond Offering”) on April 25, 2018.

In accordance with Accounting Standards Codification (“ASC”) 470-20-30-8, the Group should record a charge equal to the lower amount of either i) the Intrinsic Value of the BCF or ii) the proceeds realized upon the issuance of the Bond. The Group completed its IPO on December 17, 2018. Pursuant to the terms of the Bond, 10% of the outstanding principal amount of the Bond was automatically converted into 119,217 Class A Ordinary Shares. Upon the automatic conversion, the contingency was effectively resolved, and the value of the 10% of the BCF of \$383,629 was recorded as additional interest expense with a corresponding increase to additional paid-in capital. The remaining BCF of \$3,452,657 was recorded as debt discount, which was amortized through the maturity of the convertible debts, with a corresponding increase to additional paid-in capital.

The following lists the components of the ending balance of convertible debts as of December 31, 2019 and 2018, respectively:

	December 31, 2019	December 31, 2018
Gross convertible debts	\$ -	\$ 13,500,000
Less: Discount on issuance cost	-	314,744
Discount on BCF	-	3,077,950
Convertible debts, net	\$ -	\$ 10,107,306

For the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, the amortization of BCF and interest accretion of convertible debts were \$3,392,694, \$1,042,870 and \$nil respectively. The contractual interest for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017 were \$342,333, \$815,000 and \$nil respectively

On April 24, 2019, the Group repurchased its convertible debts at \$13.6 million with carrying amount of \$13.5 million and a gain on extinguishment on convertible debts of \$1.2 million was recognized. The repurchasing of convertible debts is considered an extinguishment and the difference between the repurchasing price of debt, and the net carrying amount of the extinguished debt and the intrinsic value of BCF is recognized on the consolidated statements of operations. The intrinsic value of BCF of \$1.3 million at the extinguishment date was recorded as a reduction of additional paid-in capital.

Convertible promissory notes

As of December 31, 2018, the Group has issued \$1,600,400 of convertible promissory notes accumulatively (the “Notes”). An unamortized debt issuance costs and discounts of \$22,935 was remaining before the IPO. For the year ended December 31, 2018, the interest accretion and the contractual interest coupon of the Notes was \$26,380 and \$8,802, respectively.

The Group completed its IPO on December 17, 2018. Pursuant to the terms of the Notes, all of the outstanding principal amount of the Notes was automatically converted into 230,252 Class A Ordinary Shares. The intrinsic value of the BCF was determined to be \$1,600,400. The Group concluded that the contingency was effectively resolved upon the automatic conversion, and recorded a one-time charge to interest expense of \$1,600,400 with a corresponding increase to additional paid-in capital.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

15. FINANCE LEASE

On May 14, 2018, the Group leased a vehicle for its operation with a lease term of 54 months, and the lease was classified as a finance lease. The following lists the components of the net present value of finance leases obligation:

	December 31, 2019	December 31, 2018
Gross finance lease obligation	\$ 157,047	\$ 210,891
Less: Discount on finance lease obligation	13,173	23,141
	143,874	187,750
Less: Current portion of finance lease obligation	46,555	43,877
Net present value of finance lease obligation, net of current portion	\$ 97,319	\$ 143,873

The present value of the net minimum payments on finance lease as of December 31, 2019 is as follows:

	2020	2021	2022	Total
Minimum lease payments	\$ 53,845	\$ 53,845	\$ 49,357	\$ 157,047
Less: Amortization of discount	7,290	4,449	1,434	13,173
Finance lease obligation	\$ 46,555	\$ 49,396	\$ 47,923	\$ 143,874

16. ORDINARY SHARES

On December 17, 2018, the Group consummated its IPO of 761,419 Class A Ordinary Shares. The shares were sold at a price of \$15.80 per share, generating gross proceeds to the Group of approximately \$12,030,420. At the completion of the IPO, \$1,732,370 offering costs was charged to additional paid-in capital. Following the consummation of the IPO and automatic conversion of the convertible debts instruments, there were an aggregate of 6,537,269 Class A Ordinary Shares issued and outstanding as of December 31, 2018.

On June 19, 2019, the Group issued 60,093 Class A Ordinary Shares to warrant holders on a cashless basis. Following the exercise of warrants (see Note 19), there were an aggregate of 6,597,362 Class A Ordinary Shares issued and outstanding as of December 31, 2019.

Holders of Class A Ordinary Shares and Class B Ordinary Shares have the same rights except for the following: (i) each Class A Ordinary Share is entitled to one vote while each Class B Ordinary Share is entitled to ten votes; and (ii) each Class B Ordinary Share is convertible into one Class A Ordinary Share at any time while Class A Ordinary Shares are not convertible under any circumstances.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

17. SHARE BASED COMPENSATION

Share option plan

A total of 5,500,000 Class A Ordinary Shares (subject to subsequent adjustments described more fully below) may be issued pursuant to awards under the 2017 Omnibus Incentive Plan (the “2017 Share Option Plan”). Subsequent adjustments include that on each January 1, starting with January 1, 2020, an additional number of shares equal to the lesser of (i) 2% of the outstanding number of Class A Ordinary Shares (on a fully diluted basis) on the immediate preceding December 31, and (ii) such lower number of Class A Ordinary Shares as may be determined by the board of directors, subject in all cases to adjustments as provided in Section 10 of the 2017 Share Option Plan. Awards will be made pursuant to agreements and may be subject to vesting and other restrictions as determined by the board of directors.

On March 15, 2019, the Company granted 218,222 share options to directors, employees, external consultants and advisors of the Group in accordance to the 2017 Share Option Plan with an exercise price of \$12.91.

A summary of the option activity as of December 31, 2019 and changes during the period is presented below:

	Number of share options	Weighted average exercise price \$	Remaining contractual term in years
Outstanding, January 1, 2019	-	-	-
Granted	218,222	12.91	12.31
Outstanding, December 31, 2019	218,222	12.91	11.51
Exercisable, December 31, 2019	-	-	-

Intrinsic value is calculated as the amount by which the current market value of a share of common stock exceeds the exercise price multiplied by the number of option. The aggregate intrinsic value of options outstanding as of December 31, 2019 was approximately \$642,000.

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model under the following assumptions.

	Date of grant
Expected volatility	95.02%-95.15%
Risk-free interest rate	2.46%-2.49%
Expected term from grant date (in years)	6.29-7.29
Dividend rate	-
Dilution factor	0.9962
Fair value	\$10.10-10.52

In connection with the grant of share options to employees and non-employees, the Group recorded share-based compensation charges of \$1,180,477 and \$432,355, respectively.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

18. NON-CONTROLLING INTEREST

As of December 31, 2018, non-controlling interest related to the 1% equity interest in APTUS BIOTECHNOLOGY (MACAO) LIMITED, 10% equity interest in mTOR (Hong Kong) Limited, 5% equity interest in Aptorum Medical Limited (“AML”), 20% equity interest in Acticule, and 20% equity interest in the Lanither Life Sciences Limited in the consolidated balance sheets was deficit of \$368,533 in total.

On March 29, 2019, AML, a majority-owned subsidiary of the Group, issued 112 shares to a director of the Group, which resulted an increase of his equity interest of AML from 5% to 6%. A deficit of \$10,672 was reclassified from additional paid-in capital to non-controlling interests within the Group’s consolidated financial statements

On April 24, 2019, the Smart Pharma Tokens (“SMPT tokens”) was announced to be launched. The SMPT tokens are secured by way of a floating charge against the Project intellectual property (“IP”) to guarantee the distribution of accrued sales-based royalties, sublicensing income or additional cash flow generated by drug candidates developed by the Smart-ACT™ platform. SMPT token holders will only be eligible to receive a token distribution if any sales-based royalties, sublicensing income or additional cash flow is generated by drug candidates developed by the Smart-ACT™ platform, as and when SPLP declares the distribution. Because the token distribution is secured by a security interest in such intellectual property rights, if and when SPLP defaults in its distribution obligations to the SMPT token holders, or in the event of liquidation, dissolution or winding up of SPLP, the floating charge may crystallize into a fixed charge over the charged assets (i.e., the Project IP owned by SPLP).

Total 1 billion SMPT tokens are offered by Smart Pharmaceutical Limited Partnership (“SPLP”), a wholly owned subsidiary of the Group. In July 2019, SPLP transferred 100,000,000 SMPT tokens to Aenco Solutions Limited, a related party of the Group, in exchange for the services related to the tokens creation, offering and 5-year consultancy service. Amount of \$300,000 were classified as a component of non-controlling interests within the Group’s consolidated financial statements. The remaining 900,000,000 SMPT tokens are remained and kept by SPLP.

As of December 31, 2019, non-controlling interest related to 10% equity interest in mTOR (Hong Kong) Limited, 6% equity interest in Aptorum Medical Limited, 20% equity interest in Acticule, 20% equity interest in the Lanither Life Sciences Limited and the token issued by SPLP in the consolidated balance sheets was deficit of \$1,509,456 in total.

For the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, non-controlling interest in the consolidated statements of operations were loss of \$1,430,176, \$302,762 and \$14,045, respectively.

19. WARRANTS

On November 30, 2018 and December 17, 2018, the Company entered into several agreements with underwriter. In return for the underwriter’s services, the Company issued an aggregate of 80,453 and 38,071 warrants to purchase the same number of the Company’s ordinary shares, for the convertible debts and the IPO, respectively. The shares were fully vested upon the IPO completion date and the fair value of the warrants was \$659,697 and \$218,147, respectively, which was calculated using the Black-Scholes pricing model, with the following weighted-average assumptions.

The Group analyzed the warrants issued in the IPO and the convertible debts in accordance with ASC Topic 815 “Derivatives and Hedging”. In accordance with ASC Topic 815, the Group determined that the warrants should not be considered index to its own stock, as the strike price of the warrants is dominated in a currency (USD) other than the primary economy environment currency of the Group (HKD). As a result, the warrants do not meet the scope exception of ASC Topic 815, therefore, should be accounted for as derivative liabilities and measure at fair value with changes in fair value be recorded in earnings in each reporting period.

All warrants were exercised on June 19, 2019 on a cashless basis. \$866,300 loss in changes in fair value of warrant liabilities was recorded in consolidated statements of operations.

	December 31, 2019		December 31, 2018
Expected volatility	-	%	58.18%
Risk-free interest rate	-		2.820%-2.822%
Expected term from grant date (in years)	-		2.43
Dividend rate	-		-
Fair value	\$ -	\$	4.60-9.48

Expected Volatility

The expected volatility used for the year ended December 31, 2018 is based upon the Company’s peer group trading history.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

Risk-Free Interest Rate

The risk-free interest rate assumption is based on U.S. Treasury instruments with a term consistent with the contractual term of the warrants issued.

Expected Term

The expected term of the warrants issued represents the remaining contractual term of the warrants.

Dividend Yield

The Company has never declared or paid any cash dividends and does not plan to pay cash dividends in the foreseeable future, and therefore, used an expected dividend yield of zero in the valuation model.

The movement of the warrants for the years ended December 31, 2019 and 2018 are as following:

	Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years
Outstanding, January 1, 2019	118,524	\$ 13.79	2.43
Exercised	118,524	\$ 13.79	1.96
Outstanding, December 31, 2019	-	\$ -	-
Outstanding, January 1, 2018	-	\$ -	-
Granted	118,524	\$ 13.79	2.50
Outstanding, December 31, 2018	118,524	\$ 13.79	2.43

20. NET LOSS PER SHARE

The following table sets forth the computation of basic and diluted loss per share:

	Year ended December 31, 2019	Year ended December 31, 2018	March 1, 2017 through December 31, 2017
Numerator:			
Net loss attributable to Aptorum Group Limited	\$ (18,686,762)	\$ (14,831,723)	\$ (2,547,462)
Denominator:			
Basic and diluted weighted average common shares outstanding	29,008,445	27,909,788	26,963,435
Basic and diluted loss per share	\$ (0.64)	\$ (0.53)	\$ (0.09)

Basic loss per share is computed by dividing net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. Diluted loss per share reflects the potential dilution that could occur if securities or other contracts to issue ordinary shares were exercised or converted into ordinary shares. Potential dilutive securities are excluded from the calculation of diluted loss per share in loss periods as their effect would be anti-dilutive.

APTORUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

21. COMMITMENTS AND CONTINGENCIES

Lease Commitments

The total future minimum lease payments under the non-cancellable operating leases with respect to the offices and the laboratory as of December 31, 2019 are as follows:

For the years ending December 31,	Amount
2020	\$ 597,198
2021	397,842
2022	75,174
2023	-
2024 and thereafter	-
Total	<u>\$ 1,070,214</u>

Rental expenses for the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017 were \$664,155, \$591,546 and \$49,518, respectively.

Contingent Payment Obligations

The Group has entered into agreements with independent third parties for purchasing office and laboratory equipment. As of December 31, 2019, the Group had non-cancellable purchase commitments of \$61,859.

The Group has additional contingency payment obligations under each of the license agreements, such as milestone payments, royalties, research and development funding, if certain condition or milestone is met.

Milestone payments are to be made upon achievements of certain conditions, such as Investigational New Drugs (“IND”) filing or U.S. Food and Drug Administration (“FDA”) approval, first commercial sale of the licensed products, or other achievements. The aggregate amount of the milestone payments that the Group are required to pay up to different achievements of conditions and milestones for all the license agreements signed as of December 31, 2019 are below:

	Amount
Drug molecules: up to the conditions and milestones of	
Preclinical to IND filing	\$ 372,564
From entering phase 1 to before first commercial sale	24,216,410
First commercial sale	15,656,410
Net sales amount more than certain threshold in a year	<u>75,769,231</u>
Subtotal	<u>116,014,615</u>
Surgical robotics and medical devices: up to the conditions and milestones of	
Before FDA approval	270,000
FDA approval obtained	<u>200,000</u>
Subtotal	<u>470,000</u>
Total	<u>\$ 116,484,615</u>

For the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, the Group incurred \$nil, \$30,000 and \$nil milestone payments, respectively. For the years ended December 31, 2019 and 2018, and the period March 1, 2017 through December 31, 2017, the Group did not incur any royalties or research and development funding, respectively. As of December 31, 2019, no other milestone payments had been triggered under any of the existing license agreements.

APTURUM GROUP LIMITED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Stated in U.S. Dollars)

22. SEGMENT REPORTING

The Group's chief operating decision maker, the Chief Executive Officer, reviews the consolidated results when making decisions about allocating resources and accessing performance of the Group as a whole and hence, the Group has only one reportable segment. The Group does not distinguish between markets or segments for the purpose of internal reporting. The Group's long-lived assets are substantially all located in Hong Kong and substantially all of the Group's expense is derived from within Hong Kong. Therefore, no geographical segments are presented.

23. SUBSEQUENT EVENTS

The Group has evaluated subsequent events through the date of issuance of the consolidated financial statements, and except for the following events with material financial impact on the Group's consolidated financial statements, no other subsequent event is identified that would have required adjustment or disclosure in the consolidated financial statements.

On January 14, 2020, Aptorum Group entered into a regional distribution agreement with Multipak Limited for the commercialization of its dietary supplement for women undergoing menopause and experiencing related symptoms. The dioscorea opposita bioactive nutraceutical tablets has commenced production in Canada and will be marketed under the brand name NativusWell™.

On February 25, 2020, the Company entered into certain securities purchase agreement (the "Purchase Agreement") with certain non-affiliated institutional investors and Jurchen Investment Corporation, the ultimate parent of the Group, pursuant to which the Company agreed to sell total 1,351,350 Class A Ordinary Shares (the "Shares") and warrants ("Warrants") to purchase 1,351,350 of the Shares, for gross proceeds of approximately \$10 million. The Warrants will be exercisable immediately following the date of issuance for a period of seven years at an initial exercise price of \$7.40. The purchase price for each Share and the corresponding Warrant is \$7.40. The Shares and Warrants were issued on February 28, 2020. Additionally, the Company issued 43,243 warrants to the placement agent on terms substantially the same as the Warrants except that the exercise price of the warrants issued to the Placement Agent was \$8.88.

On March 16, 2020, the Company granted 554,882 share options to employees, external consultants and advisors of the Group in accordance to the 2017 Share Option Plan with an exercise price of \$2.99 per share.

On January 30, 2020, the World Health Organization declared the coronavirus outbreak a "Public Health Emergency of International Concern" and on March 10, 2020, declared it to be a pandemic. Actions taken around the world to help mitigate the spread of the coronavirus include restrictions on travel, and quarantines in certain areas, and forced closures for certain types of public places and businesses. The coronavirus and actions taken to mitigate it have had and are expected to continue to have an adverse impact on the economies and financial markets of many countries, including the geographical area in which the Company operates. While the closures and limitations on movement, domestically and internationally, are expected to be temporary, if the outbreak continues on its current trajectory the duration of the supply chain disruption could reduce the availability, or result in delays, of materials or supplies to and from the Group, which in turn could materially interrupt the Group's business operations. Given the speed and frequency of the continuously evolving developments with respect to this pandemic, the Group cannot reasonably estimate the magnitude of the impact to its consolidated results of operations. Additionally, it is reasonably possible that estimates made in the financial statements have been, or will be, materially and adversely impacted in the near term as a result of these conditions, including losses on investments; impairment losses related to long-lived assets and current obligations.

35



6 January, 2020

CGY Investments Limited
Unit A, 3/F, Cheong Sun Tower
116-118 Wing Lok Street
Sheung Wan
Hong Kong

Consultancy Agreement

We are pleased and welcome the acceptance of **CGY Investments Limited (the “Consultant”)**, with its business address at Unit A, 3/F, Cheong Sun Tower, 116-118 Wing Lok Street, Sheung Wan, Hong Kong to enter into this Consultancy Agreement (**the “Agreement”**) with **Aptorum Group Limited (the “Group”)**, a company incorporated with limited liabilities under the laws of Cayman Islands, with its business address at 17/F Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong.

The following seeks to illustrate the context of the Agreement and the services to be rendered by the Consultant for the Group, and the terms and conditions as set out herewith.

1. The Group

Aptorum Group Limited and its affiliates focus on the licensing of, and acquisition of early stage preclinical assets with the intention to engage in drug research, development, and commercialization purposes. Assets are acquired via open and public platforms such as the technology transfer offices of accredited universities and academic institutions.

2. Scope of Services

- (a) The Consultant agrees to enter into this Agreement to provide certain consultancy, advisory, and management services to the Group on potential investment projects related to health care or R&D platforms. (the “Projects”)
- (b) The Consultant agrees to render consulting services to the Group for the continuance of this Agreement, devoting its best endeavours to promote the business interests of the Group by advising the Group with respect to professional advisory for the Projects.
- (c) The Consultant shall utilize due diligence and the highest professional standards of practice in performing its services under this Agreement, and shall comply with all applicable laws and regulations.

3. Date of Commencement

The Consultant shall commence its services to the Group on 10 January, 2020 (the “Effective Date”).

17/F Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong 香港干諾道中148號粵海投資大廈17樓
T: (852) 2117 6611 • F: (852) 2850 7286 • www.aptorumgroup.com

**4. Service Fees and Expenses**

- (a) Service Fees shall be provided to the Consultant with the expectation that its representative(s) devotes a suitable amount of time to adequately fulfill duties outlined in the Scope of Services for the Group; such duties may include, but not limited to, the overall steering in regulatory matters, the attendance of meetings, reviewing documentation associated to the Group's Projects or related activities where necessary.
- (b) Such Service Fees shall be **HKD104,000** per month, and shall be duly paid monthly to the Consultant subsequent to aforementioned Effective Date, and subject to the ongoing effect of the Agreement as pursuant to Section 7. Term and Termination.

5. Expense Reimbursements

The Consultant is entitled to apply for reimbursement to expense outlays from time to time, deriving from expenses such as traveling and transportation costs, accommodation cost, and other expenses where reasonably incurred in relation to its representative(s) rendering said services for the Group and its affiliates in accordance to duties and tasks described in Section 2. Scope of Services.

6. Privacy of Information

- (a) The Consultant and its representative(s) shall not except as authorized by the Group or its affiliates, or required by your responsibilities reveal to any person or company any of the trade secrets or any information concerning the organization, business, finances, transactions or affairs of the Group which may come to the knowledge during the contract with the Group and shall keep with complete secrecy confidential information entrusted to the Consultant or its representative(s) and shall not use or attempt to use any such information in any manner which may injure or cause loss either directly or indirectly to the Group or may be likely to do so. This restriction shall continue to apply if and when after the termination of this appointment without limit in time.
- (b) The Consultant and its representative(s) shall not either during the period of this appointment or afterwards use or permit to be used any books, documents, moneys, assets, records or other property belonging to or relating to any dealings, affair or business of the Group other than for the benefit of the Group. The Consultant shall immediately deliver and return to the Group all such books, documents, monies, securities, records or other property which the Consultant then have or should have in its possession upon termination of this appointment hereunder.
- (c) The Group, however, agrees to provide the Consultant in good faith with any information concerning areas of interest and relevance of the Group as required by the Consultant in order to fulfill the Scope of Services for the Group.

17/F Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong 香港干諾道中148號粵海投資大廈17樓
T: (852) 2117 6611 • F: (852) 2850 7286 • www.aptorumgroup.com



7. Term and Termination

The term of this Agreement (the "Term") shall remain in effect, unless it is terminated prior to expiration subsequent to the following circumstances:

- (a) By the Consultant, after giving the Group not less than one (1) month's notice in writing; or
- (b) By the Group, after giving the Consultant one (1) month's notice in writing; or
- (c) By the Group without notice or compensation in the event of any dishonesty, fraud, gross negligence, willful default or refusal to carry out any lawful order or instructions, or the repeated breach of any rules or regulations of the Group, or those as governed by the laws of your residency or incorporation by the Consultant or its representative(s).

Renewal of this Agreement shall be subject to the mutual agreement between the Group and the Consultant as defined in writing.

Please signify your acceptance of the above terms and conditions by signing and returning to us the enclosed duplicate copy of this Agreement.

Yours faithfully,

For and on behalf of
APTORUM GROUP LIMITED

Agreed on behalf of
CGY INVESTMENTS LIMITED

Name: HUEN Chung Yuen Ian
Position: Executive Director
Date:

Name: LUI, Man Lok Mandy
Position: Director
Date:

17/F Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong 香港干諾道中148號粵海投資大廈17樓
T: (852) 2117 6611 • F: (852) 2850 7286 • www.aptorumgroup.com

36

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Index No. 653165/2024

Plaintiff,

v.

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED,

Defendants.

BILL OF COSTS

COSTS/DISBURSEMENTS pursuant to CPLR §3215(a):

Statutory Costs of Plaintiff Karen Cheung.

Before Note of Issue (CPLR §8201(1)) \$ 200.00

DISBURSEMENTS

Fee for Index Number (CPLR §8018(a)) \$ 210.00

Service of Process (6 Defendants) \$ \$1,000.00

TOTAL COSTS AND DISBURSEMENTS \$ 1,410.00

MINYAO WANG, an attorney at law duly licensed to practice in the State of New York,
does hereby state under penalty of perjury, pursuant to CPLR 2106, as follows:

I am a partner of the firm of Lewis Brisbois Bisgaard & Smith LLP, attorneys of record for
Plaintiff Karen Cheung in the above-titled action that the foregoing disbursements have been or
will necessarily be made or incurred in this action and are reasonable in amount.

I AFFIRM ON THIS SIXTH DAY OF JANUARY 2025, UNDER THE PENALTIES OF
PERJURY UNDER THE LAWS OF NEW YORK, WHICH MAY INCLUDE A FINE OR

IMPRISONMENT, THAT THE FOREGOING IS TRUE, AND I UNDERSTAND THAT THIS DOCUMENT MAY BE FILED IN AN ACTION OR PROCEEDING IN A COURT OF LAW.

/S/ MINYAO WANG

Minyao Wang

TO:

Securis Capital Limited (f/k/a Aeneas Capital Limited),
Room 1009, 10th Floor, Office Plus at Prince Edward,
Nos. 794 – 802 Nathan Road,
Kowloon, Hong Kong;

Aeneas Management Limited,
Unit 1401, 14th Floor, Cheung Fung Commercial Building,
Nos. 21 – 25 Cheung Sha Wan Road,
Kowloon, Hong Kong;

Kenrick Henry Fok,
Flat 5B, Choi Tien Mansion, 11 Tai Koo Wan Road,
Taikoo Shing, Hong Kong;

Darren Wang Yip Lui,
Flat C, 24th Floor, Block 2, Scenecliff,
Mid-levels, Hong Kong;

Mandy Man Lok Lui,
Flat C, 24th Floor, Block 2, Scenecliff,
Mid-levels, Hong Kong; and

Aeneas Group Limited,
Unit 1306, 13th Floor, Nos. 93 – 103, Wing Lok Street,
Sheung Wan, Hong Kong;

AND

c/o Ng Wai Ip William,
Room 1003, 10th Floor, Fu Yuen South Estate,
Wong Tai Sin, Kowloon, Hong Kong.

37

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

KAREN CHEUNG (a/k/a WING TSZ CHEUNG),

Index No. 653165/2024

Plaintiff,

v.

SECURIS CAPITAL LIMITED (f/k/a AENEAS
CAPITAL LIMITED), AENEAS MANAGEMENT
LIMITED, KENRICK HENRY FOK, DARREN WANG
YIP LUI, MANDY MAN LOK LUI, and AENEAS
GROUP LIMITED,

Defendants.

JUDGMENT

The Summons with Notice having been served on Defendants Securis Capital Limited (f/k/a Aeneas Capital Limited), Aeneas Management Limited, Kenrick Henry Fok, Darren Wang Yip Lui, Mandy Man Lok Lui, and Aeneas Group Limited (collectively the “Defaulting Defendants”), and the Defaulting Defendants having failed to appear;

Now upon the Summons with Notice, with proof of service of same, the memorandum of law in support of default, the affirmation of Minyao Wang, Esq. dated November [DAY], 2024, with attached exhibits, and the affirmation of Plaintiff Karen Cheung dated November [DAY], 2024, it is:

HEREBY ORDERED, that Plaintiff Karen Cheung, whose address is [ADDRESS], Hong Kong, S.A.R., have judgment against and shall recover the sum of \$2,000,000, as demanded in the Summons with Notice, of the Defaulting Defendants, whose addresses are:

1. Securis Capital Limited (f/k/a Aeneas Capital Limited), Room 1009, 10th Floor, Office Plus at Prince Edward, Nos. 794 – 802 Nathan Road, Kowloon, Hong Kong;
2. Aeneas Management Limited, Unit 1401, 14th Floor, Cheung Fung Commercial Building, Nos. 21 – 25 Cheung Sha Wan Road, Kowloon, Hong Kong;
3. Kenrick Henry Fok, Flat 5B, Choi Tien Mansion, 11 Tai Koo Wan Road, Taikoo Shing, Hong Kong;
4. Darren Wang Yip Lui, Flat C, 24th Floor, Block 2, Scenecliff, Mid-levels, Hong Kong;
5. Mandy Man Lok Lui Flat C, 24th Floor, Block 2, Scenecliff, Mid-levels, Hong Kong; and
6. Aeneas Group Limited, Unit 1306, 13th Floor, Nos. 93 – 103, Wing Lok Street, Sheung Wan, Hong Kong; and c/o Ng Wai Ip William, Room 1003, 10th Floor, Fu Yuen South Estate, Wong Tai Sin, Kowloon, Hong Kong.

Together with costs and disbursements of this matter as taxed in the sum of [SUM], making in all the sum of \$_____ as of _____, 2024, the Plaintiff Karen Cheung shall have execution for that amount, and the judgment amount shall accrue interest at the statutory rate of 9% from the date of entry of judgment.

Judgment signed and entered this ____ day of _____, 2025.

J.S.C.

38



REQUEST FOR JUDICIAL INTERVENTION

Supreme COURT, COUNTY OF New York

Index No: 653165/2024 Date Index Issued: 06/26/2024

For Court Use Only:

CAPTION Enter the complete case caption. Do not use et al or et ano. If more space is needed, attach a caption rider sheet.	IAS Entry Date
KAREN CHEUNG (a/k/a WING TSZ CHEUNG)	
	Judge Assigned
-against- Darren Wang Yip Lui, Mandy Man Lok Lui, Kenrick Henry Fok, SECURIS CAPITAL LIMITED (f/k/a AENEAS CAPITAL LIMITED), AENEAS MANAGEMENT LIMITED, AENEAS GROUP LIMITED	RJI Filed Date
Plaintiff(s)/Petitioner(s)	
Defendant(s)/Respondent(s)	

NATURE OF ACTION OR PROCEEDING: Check only one box and specify where indicated.

COMMERCIAL <input type="checkbox"/> Business Entity (includes corporations, partnerships, LLCs, LLPs, etc.) <input type="checkbox"/> Contract <input type="checkbox"/> Insurance (where insurance company is a party, except arbitration) <input type="checkbox"/> UCC (includes sales and negotiable instruments) <input checked="" type="checkbox"/> Other Commercial (specify): RICO and other claims NOTE: For Commercial Division assignment requests pursuant to 22 NYCRR 202.70(d), complete and attach the COMMERCIAL DIVISION RJI ADDENDUM (UCS-840C) .	MATRIMONIAL <input type="checkbox"/> Contested NOTE: If there are children under the age of 18, complete and attach the MATRIMONIAL RJI Addendum (UCS-840M) . For Uncontested Matrimonial actions, use the Uncontested Divorce RJI (UD-13). REAL PROPERTY Specify how many properties the application includes: _____ <input type="checkbox"/> Condemnation <input type="checkbox"/> Mortgage Foreclosure (specify): <input type="checkbox"/> Residential <input type="checkbox"/> Commercial Property Address: _____ NOTE: For Mortgage Foreclosure actions involving a one to four-family, owner-occupied residential property or owner-occupied condominium, complete and attach the FORECLOSURE RJI ADDENDUM (UCS-840F) . <input type="checkbox"/> Partition NOTE: Complete and attach the PARTITION RJI ADDENDUM (UCS-840P) . <input type="checkbox"/> Tax Certiorari (specify): Section: _____ Block: _____ Lot: _____ <input type="checkbox"/> Tax Foreclosure <input type="checkbox"/> Other Real Property (specify): _____
TORTS <input type="checkbox"/> Asbestos <input type="checkbox"/> Environmental (specify): _____ <input type="checkbox"/> Medical, Dental or Podiatric Malpractice <input type="checkbox"/> Motor Vehicle <input type="checkbox"/> Products Liability (specify): _____ <input type="checkbox"/> Other Negligence (specify): _____ <input type="checkbox"/> Other Professional Malpractice (specify): _____ <input type="checkbox"/> Other Tort (specify): _____	OTHER MATTERS <input type="checkbox"/> Certificate of Incorporation/Dissolution [see NOTE in COMMERCIAL section] <input type="checkbox"/> Emergency Medical Treatment <input type="checkbox"/> Habeas Corpus <input type="checkbox"/> Local Court Appeal <input type="checkbox"/> Mechanic's Lien <input type="checkbox"/> Name Change/Sex Designation Change <input type="checkbox"/> Pistol Permit Revocation Hearing <input type="checkbox"/> Sale or Finance of Religious/Not-for-Profit Property <input type="checkbox"/> Other (specify): _____

SPECIAL PROCEEDINGS

<input type="checkbox"/> Child-Parent Security Act (specify): <input type="checkbox"/> Assisted Reproduction <input type="checkbox"/> Surrogacy Agreement <input type="checkbox"/> CPLR Article 75 - Arbitration [see NOTE in COMMERCIAL section] <input type="checkbox"/> CPLR Article 78 - Proceeding against a Body or Officer <input type="checkbox"/> Election Law <input type="checkbox"/> Extreme Risk Protection Order <input type="checkbox"/> MHL Article 9.60 - Kendra's Law <input type="checkbox"/> MHL Article 10 - Sex Offender Confinement (specify): <input type="checkbox"/> Initial <input type="checkbox"/> Review <input type="checkbox"/> MHL Article 81 (Guardianship) <input type="checkbox"/> Other Mental Hygiene (specify): _____ <input type="checkbox"/> Other Special Proceeding (specify): _____
--

STATUS OF ACTION OR PROCEEDING Answer YES or NO for every question and enter additional information where indicated.

	YES	NO	
Has a summons and complaint or summons with notice been filed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, date filed: 06/24/2024
Has a summons and complaint or summons with notice been served?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If yes, date served: 09/19/2024
Is this action/proceeding being filed post-judgment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If yes, judgment date: _____

NATURE OF JUDICIAL INTERVENTION Check one box only and enter additional information where indicated.

<input type="checkbox"/> Infant's Compromise <input type="checkbox"/> Extreme Risk Protection Order Application <input type="checkbox"/> Note of Issue/Certificate of Readiness <input type="checkbox"/> Notice of Medical, Dental or Podiatric Malpractice <input checked="" type="checkbox"/> Notice of Motion <input type="checkbox"/> Notice of Petition <input type="checkbox"/> Order to Show Cause <input type="checkbox"/> Other Ex Parte Application <input type="checkbox"/> Partition Settlement Conference <input type="checkbox"/> Request for Preliminary Conference <input type="checkbox"/> Residential Mortgage Foreclosure Settlement Conference <input type="checkbox"/> Waiver of Court Costs, Fees and Expenses <input type="checkbox"/> Writ of Habeas Corpus <input type="checkbox"/> Other (specify): _____	Date Issue Joined: _____ Relief Requested: Judgment - Default Relief Requested: _____ Relief Requested: _____ Relief Requested: _____	Return Date: 02/12/2025 Return Date: _____ Return Date: _____ Return Date: _____
--	---	---

RELATED CASES List any related actions. For Matrimonial cases, list any related criminal or Family Court cases. If none, leave blank. If additional space is required, complete and attach the **RJI Addendum (UCS-840A)**.

Case Title	Index/Case Number	Court	Judge (if assigned)	Relationship to instant case
Cheung v. ptorum Group Limited et al	Help 654541/2024			

PARTIES For parties without an attorney, check the "Un-Rep" box and enter the party's address, phone number and email in the space provided. If additional space is required, complete and attach the **RJI Addendum (UCS-840A)**.

Un-Rep	Parties List parties in same order as listed in the caption and indicate roles (e.g., plaintiff, defendant, 3 rd party plaintiff, etc.)	Attorneys and Unrepresented Litigants For represented parties, provide attorney's name, firm name, address, phone and email. For unrepresented parties, provide party's address, phone and email.	Issue Joined For each defendant, indicate if issue has been joined.	Insurance Carriers For each defendant, indicate insurance carrier, if applicable.
<input type="checkbox"/>	Name: CHEUNG, KAREN Role(s): Plaintiff/Petitioner	MINYAO WANG, Lewis Brisbois LLP, 77 Water Street , New York, NY 10005, 646-989-9428, Minyao.Wang@lewisbrisbois.com	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/>	Name: Lui, Darren Wang Yip Role(s): Defendant/Respondent	Flat C, 24th Floor, Block 2, Scenecliff, , Hong Kong, NY 10304	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/>	Name: Lui, Mandy Man Lok Role(s): Defendant/Respondent		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/>	Name: Fok, Kenrick Henry Role(s): Defendant/Respondent		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/>	Name: SECURIS CAPITAL LIMITED (f/k/a AENEAS CAPITAL LIMITED) Role(s): Defendant/Respondent		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/>	Name: AENEAS MANAGEMENT LIMITED Role(s): Defendant/Respondent		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/>	Name: AENEAS GROUP LIMITED Role(s): Defendant/Respondent		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input type="checkbox"/>	Name: Role(s):		<input type="checkbox"/> YES <input type="checkbox"/> NO	
<input type="checkbox"/>	Name: Role(s):		<input type="checkbox"/> YES <input type="checkbox"/> NO	
<input type="checkbox"/>	Name: Role(s):		<input type="checkbox"/> YES <input type="checkbox"/> NO	

I AFFIRM UNDER THE PENALTY OF PERJURY THAT, UPON INFORMATION AND BELIEF, THERE ARE NO OTHER RELATED ACTIONS OR PROCEEDINGS, EXCEPT AS NOTED ABOVE, NOR HAS A REQUEST FOR JUDICIAL INTERVENTION BEEN PREVIOUSLY FILED IN THIS ACTION OR PROCEEDING.

Dated: 01/08/2025

MINYAO WANG

Signature

4744314

MINYAO WANG

Attorney Registration Number

Print Name